

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**RECEIVED**  
JAN 31 1990  
OIL, GAS & MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER  MULTIPLE ZONE

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 any State requirements.)  
At surface  
NW SE Sec. 9-T34S-R15E 2,200' FSL & 2,450' FEL  
At proposed prod. zone  
SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
44.7 miles west of Blanding, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
2,400'

16. NO. OF ACRES IN LEASE  
9,520

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

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

19. PROPOSED DEPTH  
3,000' Akeh

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5,006' GR (Est.)

22. APPROX. DATE WORK WILL START\*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	60'	100 sks Class "B"
12-1/4"	8-5/8"	24#	300'	200 sks Class "G"
6-1/4"	4-1/2"	10.5#	3,000'	165 sks Light (Lead) 150 sks Class "G" (Tail)

1. Drill 17-1/2" hole and set 13-3/8" conductor @ 60', cement with good returns.
2. Drill 11" hole & set 8-5/8" surface casing @ 300', cement with good returns.
3. Log B.O.P. checks in daily drilling reports & drill 6-1/2" hole to 3,000'.
4. Conduct D.S.T. if warranted & run 4-1/2" casing if productive, cement w/good returns.
5. Run logs as needed, and perforate and stimulate as needed.

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 John A. Brund TITLE Petroleum Engineer DATE December 19, 1989

(This space for Federal or State office use)

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

PERMIT NO. 43-037-31501

APPROVAL DATE

DATE 2-21-90

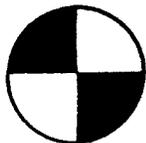
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

BY: John P. Dase

WELL SPACING: R615-3-3

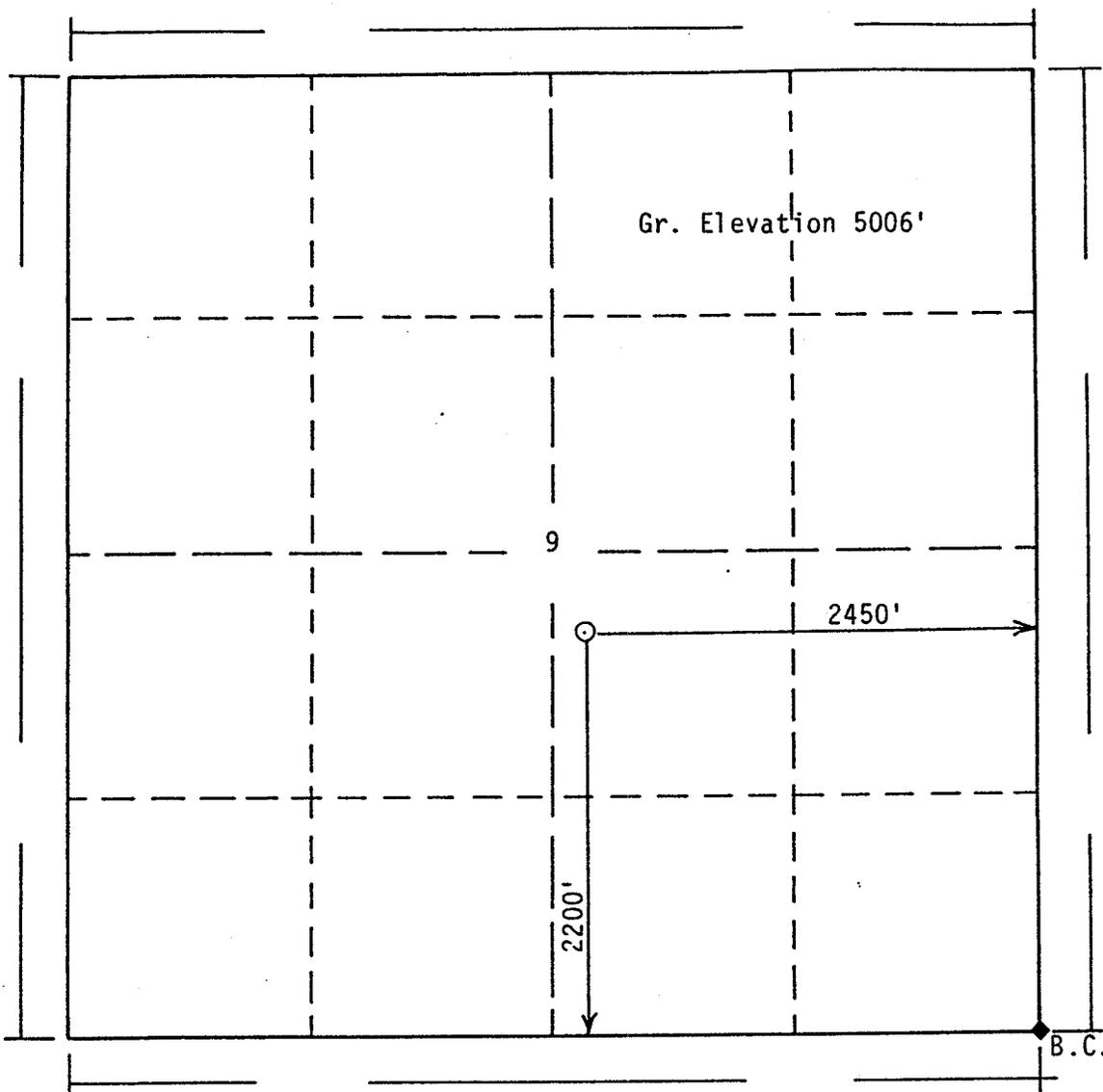
\*See Instructions On Reverse Side

EXHIBIT A



Form PS-102

R. 15 E



N

T.  
34  
S

Scale: 1"=1000'

Powers Elevation, Inc. of Denver, Colorado has in accordance with a request from John Brooks for Ampol Exploration (U.S.A.) Inc. determined the location of Federal 33-9 to be 2200fs1, 2450fe1 Section 9, Township 34 s Range 15 E of the Salt Lake Principal Meridian, San Juan County, Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Federal 33-9

Licensed Land Surveyor No. 8894  
State of New Mexico



Date:

10-25-89

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

Attached to Form 3160-3  
 Application for Permit to Drill  
 White Canyon Area  
 Ampolex (Texas). Inc.

Well: Federal 33-9  
 Location: 2,200' FSL 2,450' FEL - NW SE Section 9 T34S R15E  
 County: San Juan  
 State: Utah  
 Projected Total Depth: 3,000'  
 Estimated Ground Elevation: 5,006'  
 Estimated KB: 5,016'

**1. THE GEOLOGIC SURFACE FORMATION**

The geologic surface formation is Quarternary Colluvium on Permian Organ Rock Shale.

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS**

<u>TOPS</u>		<u>ESTIMATED DEPTH</u>
QUARTERNARY	Colluvium	(surface)
PERMIAN	Organ Rock Shale	20'
	Cedar Mesa Sandstone	30'
	Halgaito/Rico	830'
PENNSYLVANIAN	Upper Hermosa	1,430'
	Paradox (Cycles 0 & 1)	2,105'
	Ismay (Cycles 2 & 3)	2,250'
	Desert Creek (4 & 5)	2,380'
	Chimney Rock Shale	2,580'
	Akah	2,605'
	Barker Creek	2,785'
TOTAL DEPTH		3,000'

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS**

Upper Hermosa	1,430'
Desert Creek	2,380'

**4. PROPOSED CASING PROGRAM**

Hole Size	Interval Interval	Interval Length	Pipe O.D.	Weight, Grade and Coupling	New or Used
17-1/2"	0 - 60'	60'	13-3/8"	48#	NEW
12-1/4"	0 - 300'	300'	8-5/8"	24# J-55 ST&C	NEW
6-1/4"	0 - 3000'	3000'	4-1/2"	10.5# J-55 ST&C	NEW

4. PROPOSED CASING PROGRAM (Cont.)

Cement Program:

Conductor: 100 sacks, Class "B", cement to surface.  
 Surface Casing: 200 sacks Class "G", cement to surface.  
 Prod. Casing: 165 sacks of Light followed by 150 sacks Class "G" (cemented to surface; DV tool will be used as necessary to prevent fracturing)

5. THE OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Exhibit C is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to half of working pressure after nipling 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.

Accessories to the BOP will include an upper kelly cock, floor safety valve, drill string BOP 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 gel-chemical with adequate stocks of sorptive agents on site to handle any spills of fuel or oil on the surface. Additional weighting material will be on location to be added if the pressures encountered so require. Adequate stocks of lost circulation materials will also be on site. Mud weight will be increased to 9.0 - 9.5 ppg when drilling through the Desert Creek. Enough weight material will be on location to increase mud weight to 11.0 ppg if necessary.

<u>DEPTH</u>	<u>TYPE</u>	<u>WEIGHT (ppg)</u>	<u>Vis.</u>	<u>FLUID LOSS</u>
0' - 300'	Water	8.8	--	--
300' - 2,095'	Water & gel + Barite & LCM as needed.	8.8	27	--
2,095' - TD	Water, gel, soda ash, caustic soda & Barite & LCM as needed.	8.6 - 9.5	35-40	8-10

**7. AUXILIARY EQUIPMENT TO BE USED**

- a. An upper kelly cock will be kept in the drill string.
- b. A float will be used at the bit.
- c. Both a mud logging unit and detecting devices will monitor the mud system from 2,095' to T.D. Mud will also be monitored visually.
- d. A stabbing valve will be on the 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. Two drill stem tests will be conducted: one in the Ismay formation and one in the Desert Creek Formation.
- b. The logging program will consist of the following:  
Dual Induction/Sonic surface casing - TD  
FDC/CNL/GR/CBL Upper Hermosa - TD
- c. Two cores are planned: one in the Ismay and one in the Desert Creek.
- d. Completion program will be by acid treatment. An appropriate Sundry Notice will be submitted for approval.

**9. ABNORMAL PRESSURE OR TEMPERATURES**

No abnormal pressures or temperatures have been reported in wells drilled in the area at the depths anticipated in this well. Bottom hole pressure is expected to be 1,500 psi (+ or -).

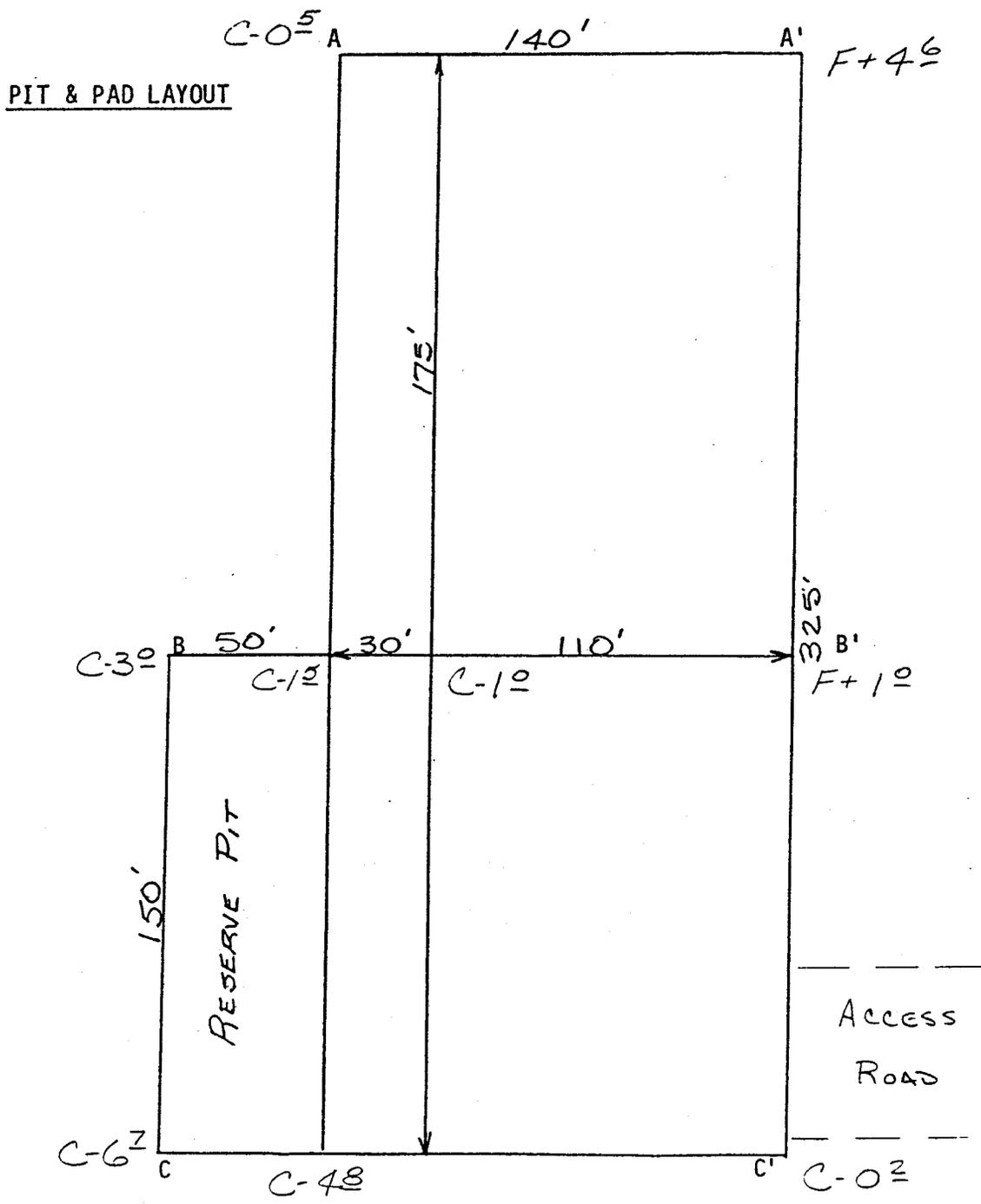
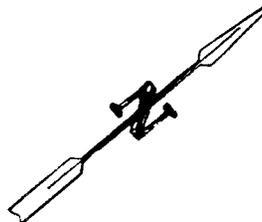
No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

**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 examination and approval of drilling requirements. Operations should be completed within twenty-one (21) days after spudding the well.

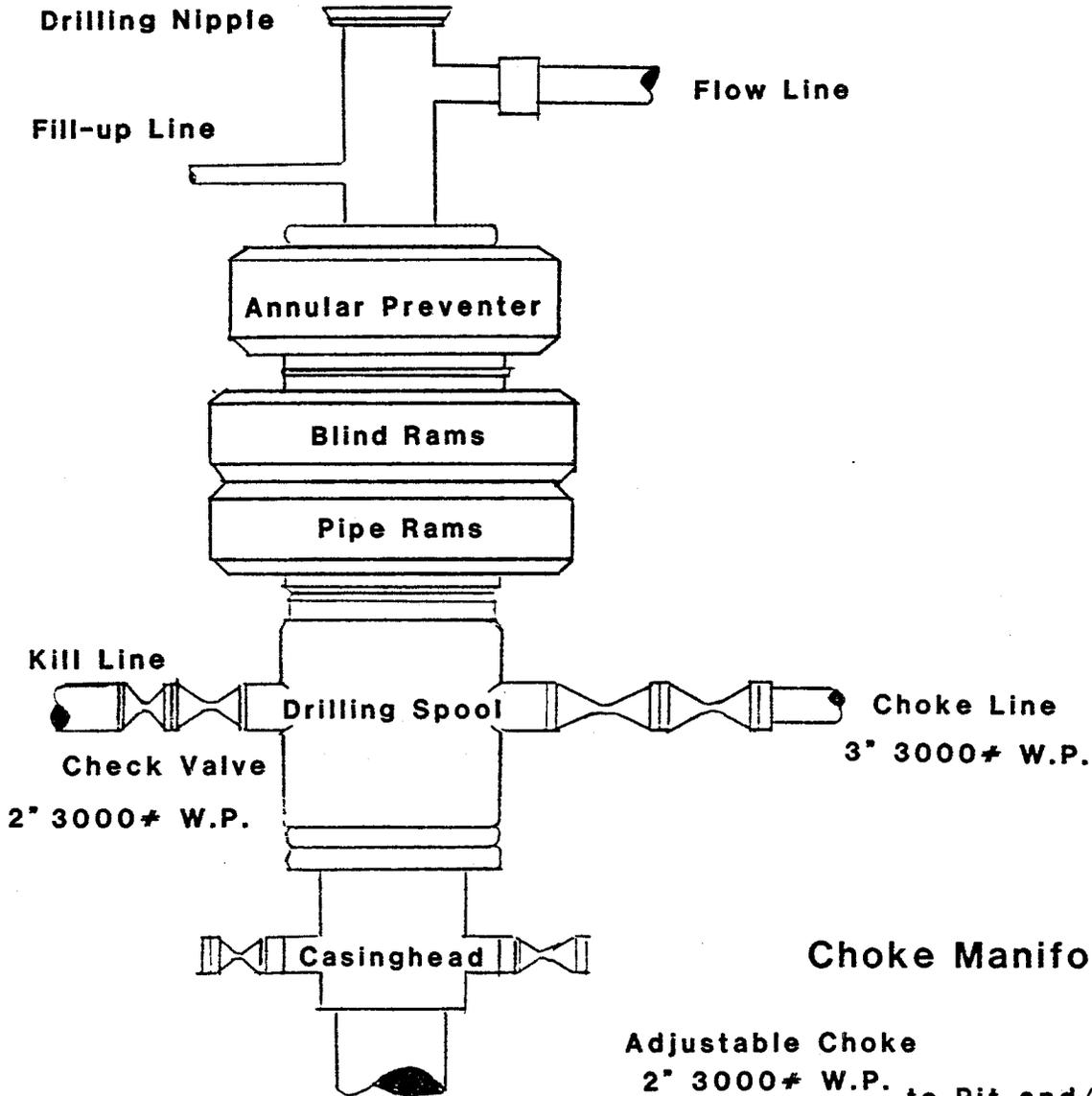
# EXHIBIT A-1

Ampol Exploration (U.S.A.) Inc.  
Federal 33-9  
Section 9, T.34S, R.15E  
2200fsl, 2450fel  
San Juan County, Utah



**EXHIBIT C**  
**Blow Out Preventer Equipment**

**BOP Stack**      **Federal 33-9**



**Choke Manifold**

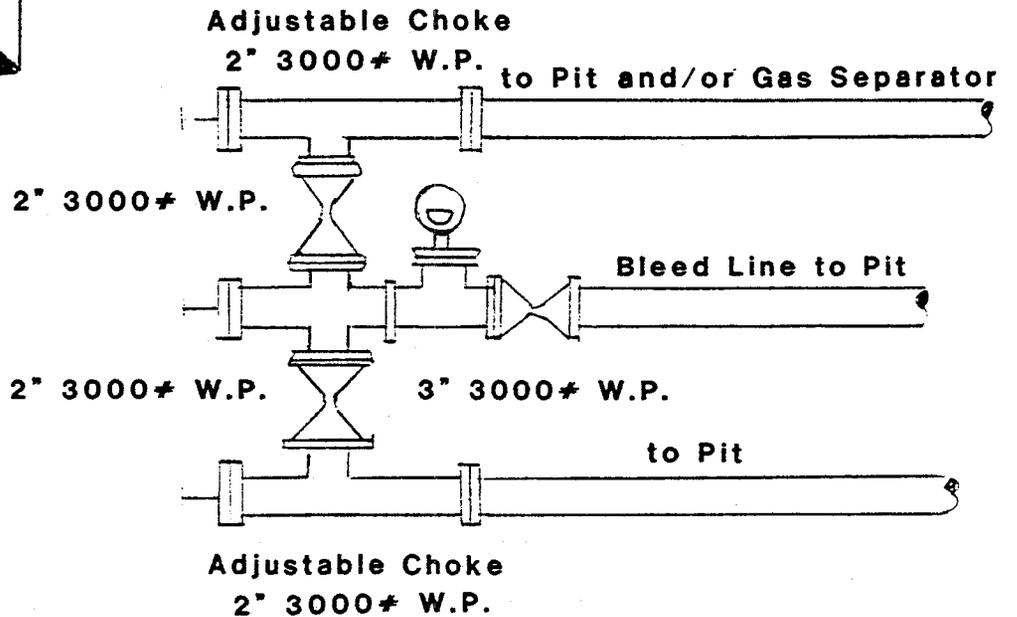


EXHIBIT D

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

Attached to Form 3160-3  
Application for Permit to Drill  
White Canyon Area  
Ampolex (Texas). Inc.

Well: Federal 33-9  
Location: 2,200' FEL 2,450' FEL - NW SE Section 9 T34S R15E  
County: San Juan  
State: Utah  
Projected Total Depth: 3,000'  
Estimated Ground Elevation: 5,006'  
Estimated KB: 5,016'

1. EXISTING ROADS

- a. The proposed well site and elevation plat is shown on Exhibits A & A-1.
- b. The distance from Fry Canyon store is 26 miles. From Fry Canyon store, go northwest on Utah State Highway 95 20 miles; turn east on San Juan County Road 208-A and go approximately 6 miles; turn southwest on dirt road approximately 600' to location.
- c. Turning east off of Utah State Highway 95, the first 1.2 miles of county road 208-A crosses land administered by the Glen Canyon National Recreation Area, from which a right-of-way permit will be obtained as necessary. A sharp switchback in 208-A along the western edge of Section 7-T34S-R15E will be modified to allow access of drilling equipment. The road will be bladed and watered as necessary. A right-of-way and road use permit will also be obtained from the San Juan County Road Department.
- d. All roads to location are coded on Exhibit E. The only road construction required will be for the 600' of access road as shown on Exhibit E. An encroachment permit will be obtained from the San Juan County Road Department for use of county roads, and the Utah Department of Transportation for use of State roads.

There will be approximately 600' of new access road required. Existing roads are shown on Exhibit E. The proposed 600' of road will run in a southwesterly direction from San Juan County Road Department 208-A. The maximum

2. PLANNED ACCESS ROADS (Cont.)

total disturbed width will be 30'. This proposed route is also shown on Exhibit E and will require an encroachment permit from the Utah Department of Transportation. Use of this road will be required for approximately thirty (30) days for drilling operations and up to thirty (30) or more years if the well is productive. If the well is not productive, the access road will be rehabilitated within sixty (60) days of cessation of drilling operations in the manner set forth below in Item 10, Plans for Restoration of Surface. Surface disturbance and vehicular traffic will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

3. LOCATION OF EXISTING WELLS

- a. There are no water wells within a one-mile radius of this location.
- b. There are no abandoned wells in this one-mile radius.
- c. There are no temporarily abandoned wells in this one-mile radius.
- d. There are no disposal wells in this one-mile radius.
- e. There are no wells presently being drilled in this one-mile radius.
- f. There are no producing wells in this one-mile radius.
- g. There are no shut-in wells in this one-mile radius.
- h. There are no injection wells in this one-mile radius.

**3. LOCATION OF EXISTING WELLS (Cont.)**

- i. There are no monitoring or observation wells for other uses in this one-mile radius.

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

Since this well is an exploration well with little or no basis for identifying the nature of potential hydrocarbons that might be found, if any, Ampolex prefers to obtain drilling results before submitting plans for placement of production and/or gathering facilities.

**5. LOCATION AND TYPE OF WATER SOURCE**

- a. The source of water will be the Colorado River. The river will be accessed by Farley's Access, a county-maintained gravel road, that traverses three (3) miles through the Glen Canyon National Recreation Area between Highway 95 and the river. A right-of-way permit will be obtained from the Glen Canyon N.R.A. and the San Juan County Road Department. A temporary water use permit will be obtained from the Utah State Engineer in Price, Utah.
- b. Water will be transported by truck over existing roadways and proposed access road(s) as shown on Exhibit E.
- c. No water well is currently planned to be drilled on this lease.

**6. CONSTRUCTION MATERIALS**

- a. 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.
- b. It is anticipated that 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, additional surface materials from local contractors or Ampolex-owned BLM leases in the area may be needed; it is understood that the use of materials under BLM jurisdiction is governed by 43 CFR 3610.

6. CONSTRUCTION MATERIALS (Cont.)

- c. All major access roads presently exist as shown on Exhibit E.

7. HANDLING OF WASTE MATERIALS AND DISPOSAL

- a. Drill cuttings will be buried in the reserve pit.
- b. Drilling fluids will be handled in the reserve pit.
- c. Any fluids produced during a drilling test or while conducting a production test will be collected in a test tank. Any spills of oil, gas or salt waters will be cleaned up and removed. If well is productive, produced water will be stored on-site for ninety (90) days after initial production. After that time, application will be made for approval of permanent disposal method in compliance with NTL-2b.
- d. Portable chemical facilities will be provided for human waste.
- e. Garbage and non-flammable waste and salt and other chemicals produced during drilling or testing will be handled in a trash basket and hauled to a county refuse facility as necessary.

8. ANCILLARY FACILITIES

Camp facilities will not be required on location other than three (3) trailers. A camper or trailer may be required at the water source for water-hauling operations. If so required, approval will be sought in conjunction with application for the water-use permit from the Glen Canyon N.R.A. and/or San Juan County Road Department.

9. WELL-SITE LAYOUT

The well-site layout is depicted in Exhibit G (cut and fill cross-sections) and in Exhibit H (drill rig layout).

10. PLANS FOR RESTORATION OF SURFACE

- a. Within 24 hours of completion of drilling, the location and surrounding area will be cleared of all debris, materials, and junk not required for production.

10. PLANS FOR RESTORATION OF SURFACE (Cont.)

- b. Within 18 months following the cessation of drilling operations, or when the reserve pit dries, whichever is least, all areas not needed for production (including access road) will be filled in, recontoured to approximately natural contours and as much top soil as was removed replaced, leaving enough for future restoration (unless well is a dry hole). The remaining top soil, if any, will be stabilized and seeded in place. After contouring and prior to seeding, location will be "ripped" and "torn" in 18" widths, 6" deep.
  
- c. The area will be seeded between October 1st and February 28th with:
  - 2 lbs./acre Indian ricegrass
  - 2 lbs./acre Galleta
  - 2 lb./acre Fourwing saltbush
  - 2 lb./acre Shadescale
  - 1 lb./acre Ephedra
  
- d. Seed will be drilled or broadcast; if broadcast, seed amounts will be doubled.

11. OTHER INFORMATION

- a. No occupied dwellings are known to exist in the area.
  
- b. The closest live water is the Colorado River, approximately 5.5 miles northwest of the intersection of State Highway 95 and San Juan County Road 208-A.
  
- c. A dry hole on BLM land in Section 4-T35S-R15E was drilled in 1961 and has been converted to a water well, and is currently used for ranching purposes. Conversations between the water hauling contractor and the rancher indicated the well would not be able to supply sufficient volumes of water for drilling operations even if substantial improvements were made to the pumping apparatus.

- d. There are no reported restrictions or reservations noted on the oil and gas lease.
- e. Drilling is planned for late February 1990. It is anticipated that the casing point will be reached within 16 days after commencement of drilling operations.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

John A. Brooks  
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.

12/19/89  
DATE

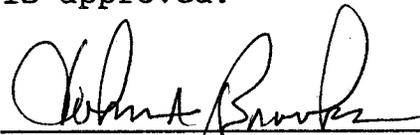
  
\_\_\_\_\_  
Ampolex (Texas), Inc.  
John A. Brooks  
Petroleum Engineer

EXHIBIT F

# Cultural Resource Management Report

FEDERAL 33-9 CULTURAL RESOURCES INVENTORY  
SAN JUAN COUNTY, UTAH

Written By:

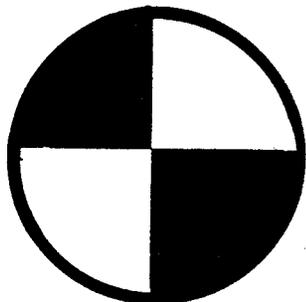
Brian P. O'Neil, M.A.

Submitted To:

AMPOL EXPLORATION (U.S.A.), INC.  
1225 - 17th Street, Suite 3000  
Denver, Colorado 80202

Date:

November 7, 1989

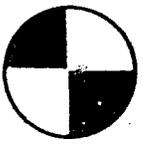


***POWERS ELEVATION CO., INC.***

P.O. Box 440889  
Aurora, CO 80044  
(303) 321-2217



**Archaeology Department**



# Powers Elevation Co., Inc.

P.O. Box 440889, Aurora, CO 80044  
Phone 303-321-2217  
Toll Free 1-800-824-2550  
FAX 303-321-2217

PROJECT IDENTIFICATION: A cultural resources inventory for Ampol Exploration (U.S.A.), Inc., White Canyon Prospect, Federal 33-9, well pad, San Juan County, Utah; Bureau of Land Management, San Juan Resource Area.

ANTIQUITIES PERMIT NO: 88UT54629  
STATE PERMIT PROJECT NO: U-89-PA-639b

FILES SEARCH: A files search was conducted at the State of Utah, Division of State History, Archaeological Records Office, on October 17, 1989. The files search, by Ms. Evelyn Seelinger, revealed no previous surveys had been conducted within the section associated with this project. An additional files search was conducted at the BLM San Juan Resource Area, in Monticello, Utah on October 26, 1989. This files search also revealed no previous surveys within the section associated with this project. No previously recorded sites are reported by either agency within that portion of the section associated with this project.

LOCATION: The proposed project is located at 2,200' FNL, 2,450' FEL, Section 9, T.34S., R.15E.

MAP REFERENCE: Copper Point, 7.5', 1987. provisional.

DATE OF INVESTIGATION: October 28, 1989.

PERSONNEL: Brian P. O'Neil, Field Investigator; Marcia J. Tate, Principal Investigator.

PROPOSED ACTION: The proposed action is the construction of a well pad measuring approximately 350 feet northwest-southeast by 200 feet northeast-southwest. The access road to the proposed well location is approximately 400 feet long from its take off point along San Juan County Road 208 A.

The objectives of the cultural resources inventory were to locate and document any historic or prehistoric cultural resources occurring within the proposed well location and staging area, and to recommend appropriate procedures for the management of such resources. The accomplishment of these objectives fulfills the compliance requirements set forth in the Antiquities Act of 1906, the Historic Preservation Act of 1966, Executive Order No. 11593 of 1971, the Archaeological and Historic Conservation Act of 1980, the Utah State Antiquities Act of 1973, and the Archaeological Resources Protection Act of 1979.

ENVIRONMENT: The proposed project area is located in the Colorado River canyon country of the Colorado Plateau in southeastern Utah. The local landforms consist of benched and incised tributary drainages to the Colorado River which have downcut through the Navajo, Kayenta, and Wingate Sandstones, and

ENVIRONMENT, CONTINUED: ...into the Chinle and Moenkopi Formations. Exposed to the east is the underlying White Rim Sandstone of the Cutler Group. The nearest permanent drainage is White Canyon. The soils in the project area are a reddish-brown, silty, sandy clay loam with sandstone talus. Vegetation consists of juniper, Fremont barberry, snakeweed, antelope brush, Mormon tea, shadescale, prickly pear cactus, and sparse native grasses. Ground visibility is approximately 60 to 95%. Slope is 2 to 10% grades, and the exposure is northeasterly. Elevation is approximately 5,000 feet.

FIELD METHODS: A 10 acre area surrounding the well pad center stake was surveyed by walking a series of parallel east-west transects at intervals of 15 m. Ant hills, rodent burrows, road cuts, and erosional cuts etc. were examined for evidence of buried cultural materials. The access to the proposed well location is located within the 10 acre survey area.

RESULTS: No historic or prehistoric cultural resources were observed within the proposed project survey area. A total area of 10 acres was surveyed.

RECOMMENDATIONS: Due to the absence of any prehistoric or historic cultural resources within the proposed project area, we recommend that the project be allowed to proceed.

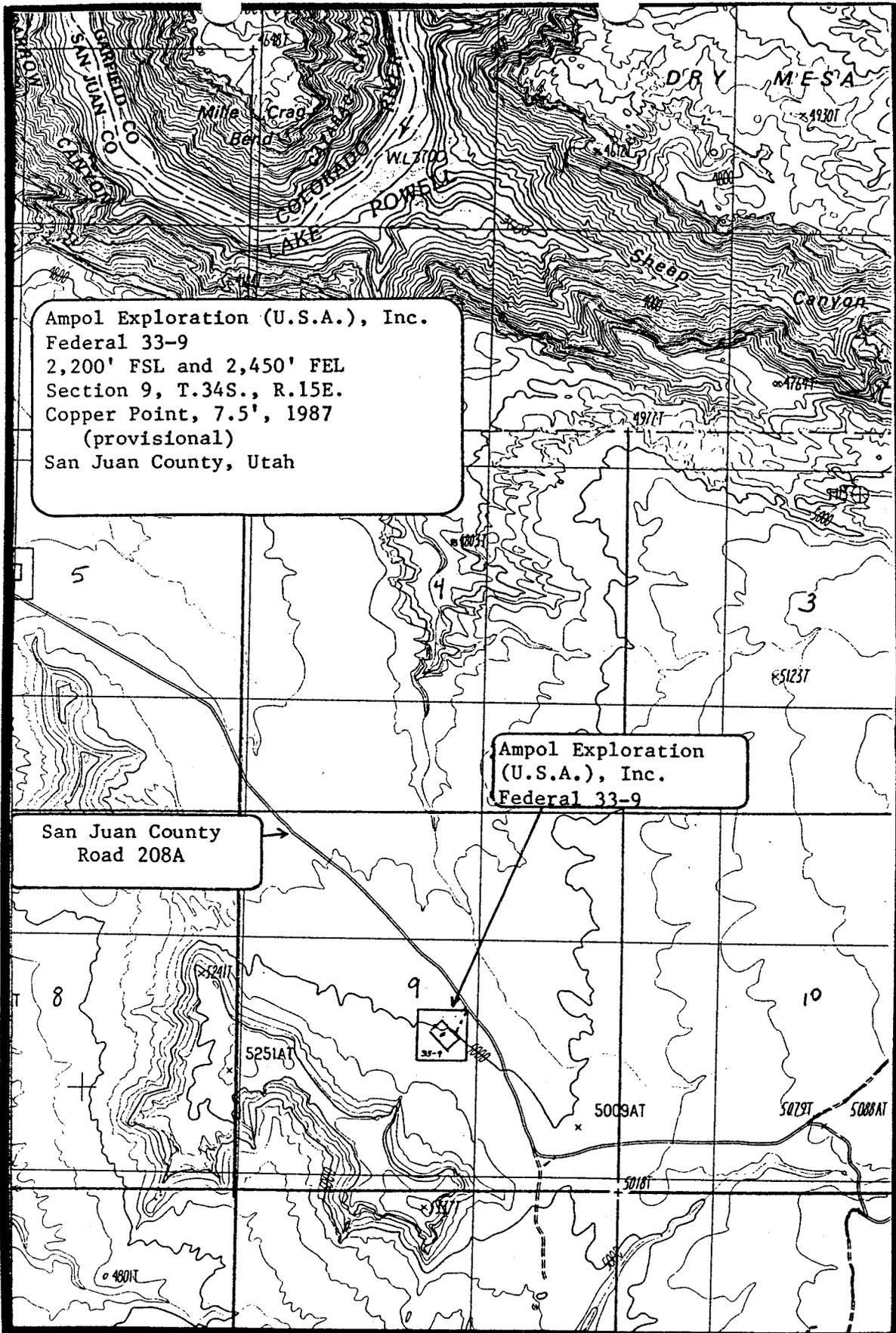
Marcia J. Tate      11/9/89  
Marcia J. Tate      Date  
Principal Investigator

MJT:sr

Ampol Exploration (U.S.A.) Inc.  
Federal 33-9  
2,200' FSL and 2,450' FEL,  
Section 9, T.34S., R.15E.  
San Juan County, Utah



Looking west at center stake.

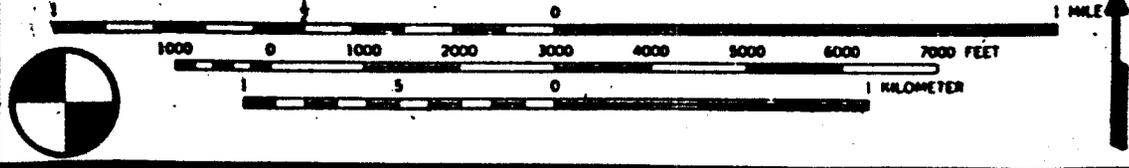


Ampol Exploration (U.S.A.), Inc.  
Federal 33-9  
2,200' FSL and 2,450' FEL  
Section 9, T.34S., R.15E.  
Copper Point, 7.5', 1987  
(provisional)  
San Juan County, Utah

Ampol Exploration  
(U.S.A.), Inc.  
Federal 33-9

San Juan County  
Road 208A

SCALE 1:24 000



# EXHIBIT G

Ampol Exploration (U.S.A.) Inc.  
Federal 33-9  
Section 9, T.34S, R.15E  
2200fsl, 2450fel  
San Juan County, Utah

## CROSS SECTIONS & DIRT QUANTITIES

Pad cut 3087cu yds  
Pit cut 2777cu yds  
Pad fill 1083cu yds

### Scale

Horizontal: 1"=30'

Vertical: 1"=10'

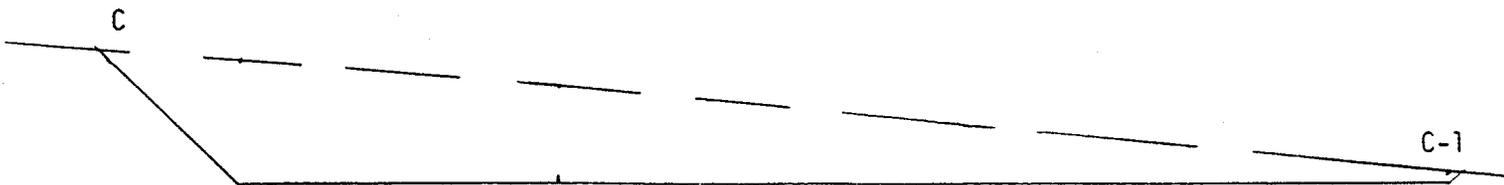
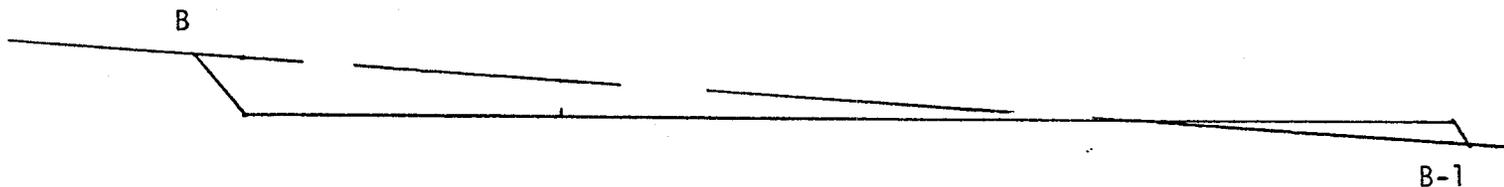
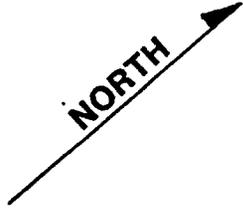


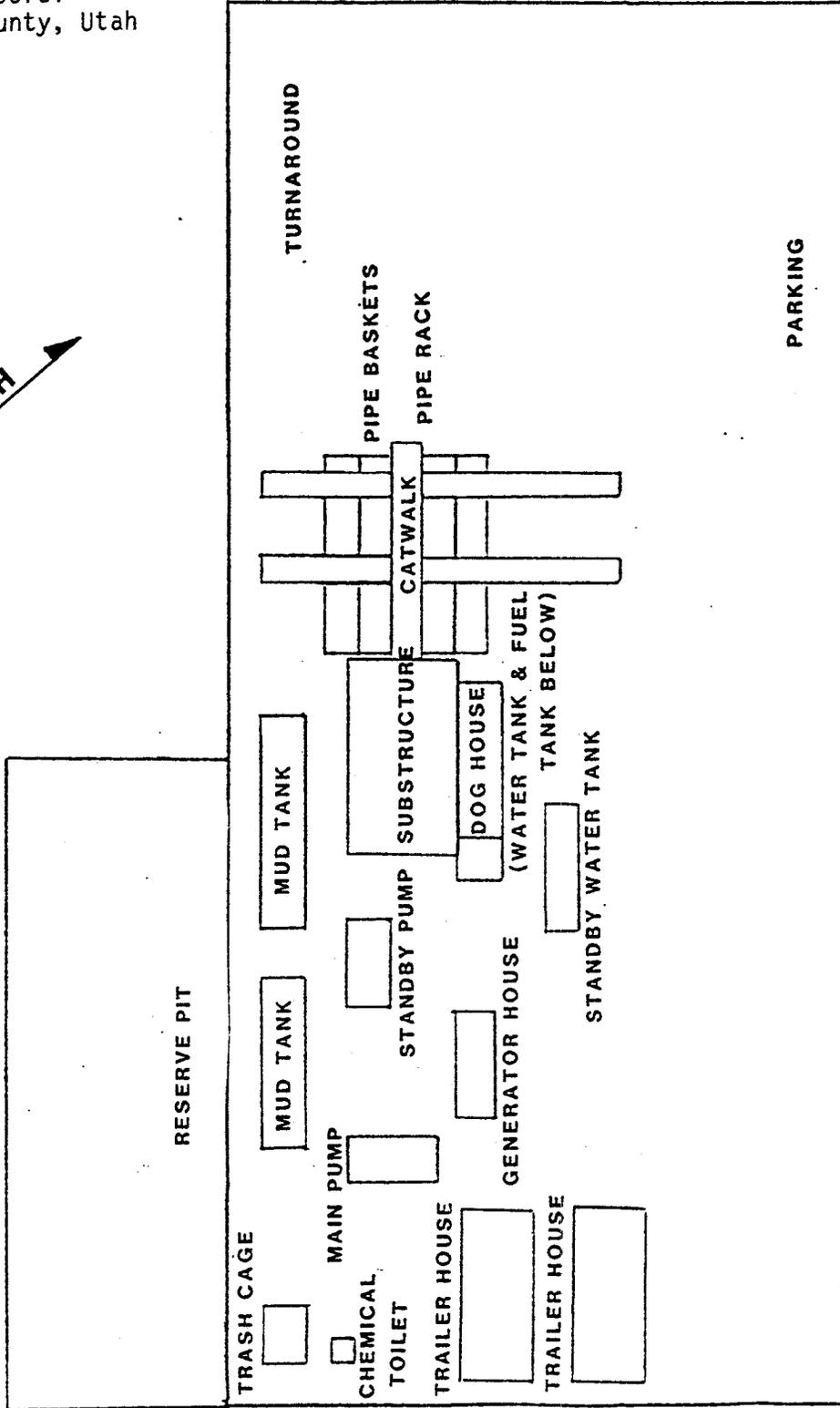
EXHIBIT H

Ampolex (Texas), Inc.  
Federal 33-9  
Section 9, T.34S, R.15E  
2200fs1, 2450fel  
San Juan County, Utah



150'

50'



140'

325'

SCALE: 1" = 40'

ACCESS

**EVIDENCE OF BOND COVERAGE**  
**EXHIBIT'S I-1 & I-2**  
**(attached)**

**EXHIBIT I-1**

United States Department of the Interior  
Bureau of Land Management  
Nationwide Oil & Gas Bond  
Form 3104-8  
Bond No. 69HF3973

**EXHIBIT I-2**

State of Utah Bond of Lessee  
Bond No. TO 02 01 44 3

**COPY**

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.

**POWER OF ATTORNEY**

Insurance Company of North America  
a CIGNA company

**CIGNA** 141227

**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 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, 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 9, 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



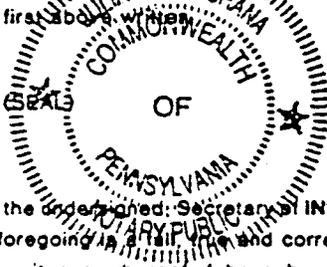
INSURANCE COMPANY OF NORTH AMERICA  
by [Signature]  
JOHN B. FITZGERALD, JR., Vice President

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]  
Notary Public  
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. Wyllie  
Secretary

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

COPY

Form 3104-3  
(July 1984)

69HF3973

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  
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 the 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, agrees 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

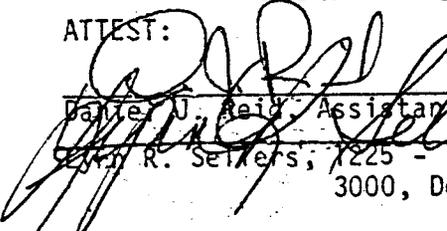
WHEREAS the principal and surety agree that in the event of any default under the leases, the lessor may commence and prosecute any claim, suit, action, or other proceeding against the principal and surety, or either of them, without the necessity of joining the lessees.

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 to be void; otherwise to remain in full force and effect.

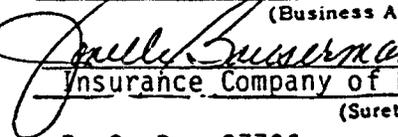
Signed on this 1st day of July, 1987, in the presence of:

NAMES AND ADDRESSES OF WITNESSES

ATTEST:

  
Walter J. Reid, Assistant Secretary  
John R. Sellers, 1225 - 17th Street, Suite  
3000, Denver, CO 80202

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

  
J. Busserman 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]  
Dante J. Reid, Assistant Secretary

[Signature]  
Witness and Address  
1227 - 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

AMPOL 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, 19 87.

Witnesses: ATTEST:

[Signature]  
Daniel J. Reid, Assistant Secretary

[Signature]  
Witness: Lynn R. Sellers

[Signature]

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

By [Signature]  
(Principal)

B. D. Emmett, Vice President

[Signature]  
(Principal)

[Signature]  
(Principal)

Insurance Company of North America

(Surety)

[Signature]  
Attorney-in-fact

574164

**POWER OF ATTORNEY**  
**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.

(SEAL) LETITIA H. CLARK  
Notary Public Phila. Phila. County  
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 S. Wyllie*  
JAMES S. WYLLIE Secretary

**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 3.13 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, 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 on any power of attorney granted pursuant to this Resolution, and the signatures 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, 1975 and March 23, 1977.

does hereby nominate, constitute and appoint **JONELLE BAUSERMAN, and KARLA J. REUTIMAN, both 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 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 1989



COMMONWEALTH OF PENNSYLVANIA  
COUNTY OF PHILADELPHIA

INSURANCE COMPANY OF NORTH AMERICA

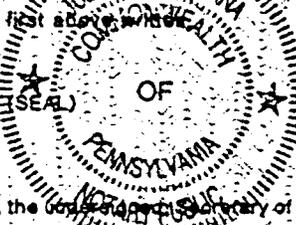
by

*John B. Fitzgerald, Jr.*  
JOHN B. FITZGERALD, JR., Vice President

On this 25th day of April, A.D. 1989, 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 TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year



*Julia Anna Rohana*  
Julia Anna Rohana - 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



*James S. White*  
James S. White  
Secretary

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

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

FILING FOR WATER IN THE STATE OF UTAH

RECEIVED

Rec. by: [initials]
Fee Rec. 130.00
Receipt # 127067
Microfilmed
JAN 02 1990

JAN 02 1990

APPLICATION TO APPROPRIATE WATER

OIL, GAS & MINING

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

Appropriate

8. List any other water right 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 Aable 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. Wade 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

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:  
Upon Approval
- 
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Southeastern Utah Association of Governments
- 
5. TYPE OF ACTION:  Lease  Permit  License  Land Aquisition  
 Land Sale  Land Exchange  Other\_\_\_\_\_
- 
6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill
- 
7. DESCRIPTION:  
Ampolex (Texas), Inc. proposes to drill a wildcat well, the Federal #33-9, on federal lease number U-62995 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)  
NW/4 SE/4, Section 9, Township 34 South, Range 15 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: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL  
John Baza  
PHONE: 538-5340
- John R. Baza*  
DATE: 2/6/90  
Petroleum Engineer
-

OPERATOR Ampolex (Texas) Inc. (N0385) DATE 2-1-90

WELL NAME Federal #33-9

SEC NWSE 9 T 34S R 15E COUNTY San Juan

43-037-31501  
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 12-89 to 12-90  
Archaeological Survey 11-7-89  
RDC 2-5-90 / Process 2-20-90  
Need exception location request / Received 2-6-90

APPROVAL LETTER:

SPACING:  R615-2-3 N/A  R615-3-2  
UNIT  
 N/A  R615-3-3  
CAUSE NO. & DATE

STIPULATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONFIDENTIAL  
PERIOD  
EXPIRED  
ON 12-2-93



# 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.

6 February 1990

**RECEIVED**  
FEB 06 1990

Utah Board of Oil, Gas and Mining  
3 Triad Center Suite 350  
355 West Temple  
Salt Lake City, Utah 84180-1203  
ATTN: Lisha Romero

DIVISION OF  
OIL, GAS & MINING

RE: Application for Permit to Drill  
Federal 21-26 565' FNL 1270' FNL Sec 26-T35S-R15E  
~~Federal 33-9 2200' FSL 2450' FEL Sec 9-T34S-R15E~~  
Federal 22-12 1620' FNL 1810' FWL Sec 12-T34S-R14E  
San Juan County, Utah  
Lease Numbers U-62997, U-62995, U-62994  
Request for Exception to General State Spacing

Dear Lisha:

Pursuant to our conversation 5 February, I am requesting an exception to General State Spacing for the three referenced proposed oil well drilling locations, located in San Juan County, Utah. The only landowner within a 460 foot radius of any location is the Bureau of Land Management, and in each case that land is leased by Ampolex. The Federal 21-26 and 33-9 locations were picked based on seismic data (both proposed wells are located directly on seismic lines) and Ampolex hopes to gain a measure of sub-surface geologic control for the seismic line we shot through these locations. The Federal 22-12 location is the western-most test of our leased acreage in the area. It is requested that it be granted an exception to General State Spacing because of this and also, primarily because of terrain problems. The surface is solid rock with very little topsoil for building a drilling pad; the BLM required us to move this proposed well to its current location at the on-site pre-drill inspection held on November 7, 1989 because of the rough topography. Due to the nature of the terrain the BLM has also stipulated that Ampolex must construct a much smaller drill-site to minimize surface disturbance. If there are any other questions pertaining to the processing of this or another Application for Permit to Drill, please do not hesitate to call me in Denver at 303-297-1000.

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

John A. Brooks  
Petroleum Engineer  
AMPOL EXPLORATION (U.S.A.), INC.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.  
U-62995

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

UNIT AGREEMENT NAME  
N/A

7. FARM OR LEASE NAME  
Federal

9. WELL NO.  
33-9

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
Section 9-T34S-R15E

12. COUNTY OR PARISH | 13. STATE  
San Juan | Utah

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, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
NW SE Sec. 9-T34S-R15E 2,200' FSL & 2,450' FEL  
At proposed prod. zone  
SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
44.7 miles west of Blanding, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 2,400'

16. NO. OF ACRES IN LEASE 9,520

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

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

19. PROPOSED DEPTH 3,000'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5,006' GR (Est.)

22. APPROX. DATE WORK WILL START\*

RECEIVED  
FEB 20 1990

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	60'	100 sks Class "B"
12-1/4"	8-5/8"	24#	300'	200 sks Class "G"
6-1/4"	4-1/2"	10.5#	3,000'	165 sks Light (Lead) 150 sks Class "G" (Tail)

1. Drill 17-1/2" hole and set 13-3/8" conductor @ 60', cement with good returns.
2. Drill 11" hole & set 8-5/8" surface casing @ 300', cement with good returns.
3. Log B.O.P. checks in daily drilling reports & drill 6-1/2" hole to 3,000'.
4. Conduct D.S.T. if warranted & run 4-1/2" casing if productive, cement w/good returns.
5. Run logs as needed, and perforate and stimulate as needed.

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 John A. Brook TITLE Petroleum Engineer DATE December 19, 1989

(This space for Federal or State office use)

PERMIT NO. 43-037-31501 APPROVAL DATE \_\_\_\_\_

APPROVED BY /S/ WILLIAM C. STRINGER TITLE Adm- Minerals DATE FEB 15 1990

CONDITIONS OF APPROVAL, IF ANY:

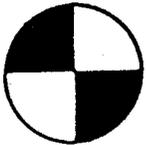
CONDITIONS OF APPROVAL ATTACHED  
\*See Instructions On Reverse Side

FLARING OR VENTING OF  
GAS IS SUBJECT TO NTL 4-A  
Dated 1/1/80

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.

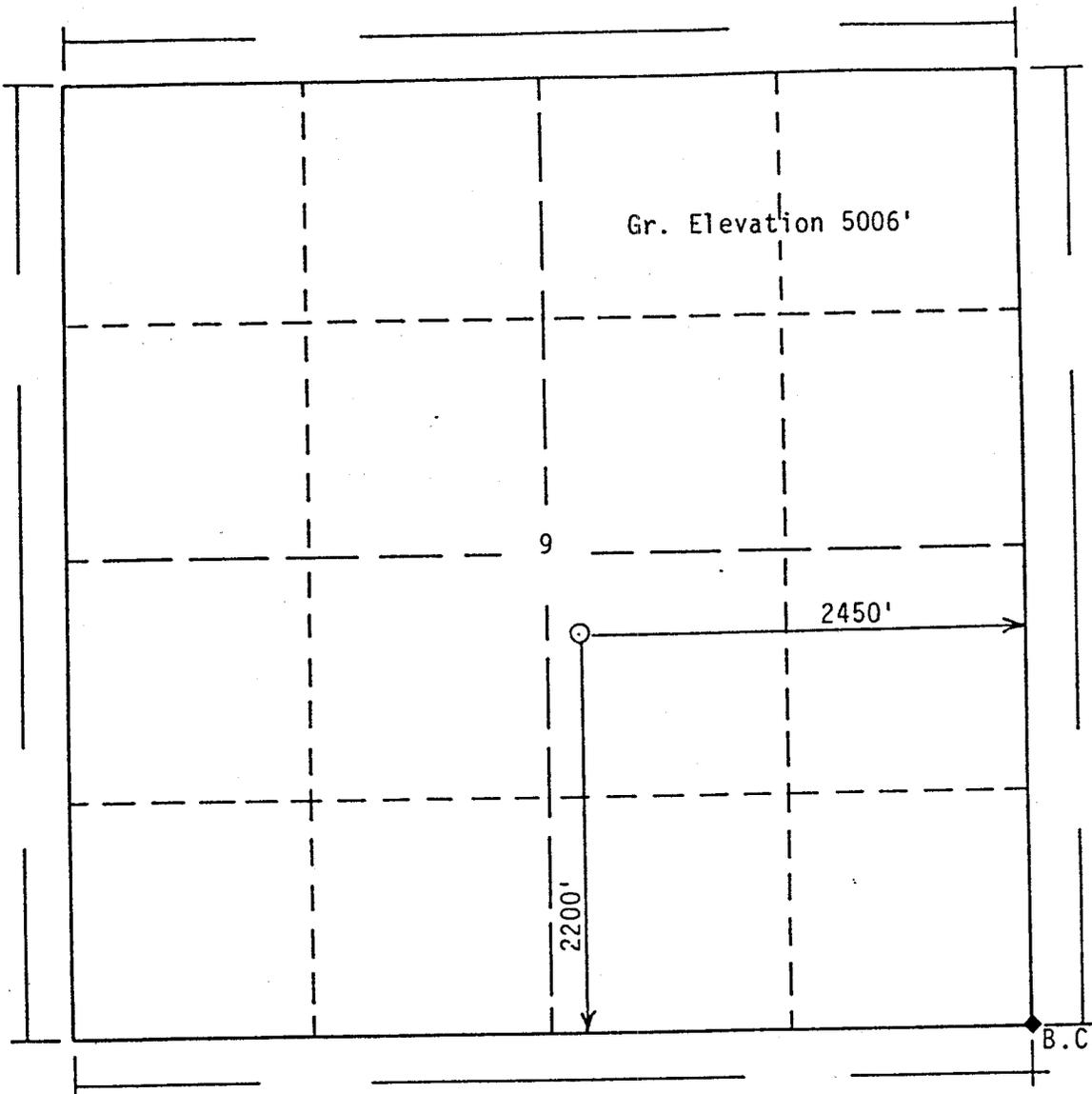
DOGMA

EXHIBIT A



Form PS-102

R. 15 E



T. 34 S

Scale: 1"=1000'

Powers Elevation, Inc. of Denver, Colorado has in accordance with a request from John Brooks for Ampol Exploration (U.S.A.) Inc. determined the location of Federal 33-9 to be 2200fs1, 2450fe1 Section 9, Township 34 s Range 15 E of the Salt Lake Principal Meridian, San Juan County, Utah



Date: 10-25-89

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Federal 33-9

Licensed Land Surveyor No. 8894  
State of New Mexico

Ampolex (Texas) Inc.  
Well No. Federal 33-9  
Sec. 9, T. 34 S., R. 15 E.  
San Juan County, Utah  
Lease U-62995

#### 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 Bond No. C00701 (Principal: 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.

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

1. If unconsolidated rock is encountered, conductor shall be set ten (10) feet into underlying bedrock with cement circulated to surface.
2. If the well is productive, production casing will be cemented to surface.
3. If the Cedar Mesa Sandstone proves to be a significant fresh water aquifer, we will require future wells to have surface casing set 50 feet below the base of the Cedar Mesa Sandstone.

## B. SURFACE USE PLAN

1. 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.
2. "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.
3. The dirt contractor will be provided with an approved copy of the surface use plan.
4. 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.

5. 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.
6. 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.

7. The restoration of the surface will commence within 60 days of completion of drilling for all areas not needed for production.
8. Access roads will be flat bladed a maximum of 20 feet wide.
9. Drilling fluids will not contain chromates or any other hazardous type of materials.

C. INFORMATIONAL ATTACHMENT / ONSHORE OIL AND GAS ORDER NO. 2 GUIDELINES

- 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,

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 filling 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 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 or minimum limit specified within Onshore Order No. 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 that 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 test 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 centrizers 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 directions 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.

#### D. 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  $\frac{1}{4}$   $\frac{1}{4}$  section, township and range"; "Lease number".

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 BOPE and/or 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 Assistant District Manager, Minerals Division. 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,      Office Phone: (801) 259-6111

Chief, Branch of Fluid Minerals

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. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

February 21, 1990

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

Gentlemen:

Re: Federal #33-9 - NW SE Sec. 9, T. 34S, R. 15E - San Juan County, Utah  
2200' FSL, 2450' 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 #33-9  
February 21, 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 43-037-31501.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

lcr  
Enclosures  
cc: Bureau of Land Management  
D. R. Nielson  
J. L. Thompson  
WE14/7-8

Moab District  
P. O. Box 970  
Moab, Utah 84532

3162 (U-065)  
(U-51619)  
(U-62889)  
(U-62994)  
(U-62995)  
(U-62997)

APR 17 1991

Mr. Bob Arceneax  
Ampol Exploration U.S.A., Inc.  
1225 17th Street  
Denver, Colorado 80202

Re: Applications for Permit to Drill  
Wells Leases  
Federal 22-5 U-51619  
Federal 21-12 U-62889  
Federal 33-24 U-62994  
Federal 22-12 U-62994  
Federal 33-9 U-62995  
Federal 21-26 U-62997

RECEIVED

APR 19 1991

DIVISION OF  
OIL GAS & MINING

43-037-31501 *del*

Dear Mr. Arceneax:

This letter hereby re-activates approval to drill the above referenced wells. This approval is effective April 4, 1991 and is valid for one year from this date.

By letter of June 8, 1990, the original approval to drill these wells was rescinded, based on instruction in State Director Review UT-90-3 to re-analyze and re-complete the Environmental Assessment associated with the APD's. This work has now been completed and the subject APD's re-approved with mitigation measures as outlined in the EA attached as conditions of approval to the APD's.

You may begin work at your convenience subject to the prior notifications requirements identified in the conditions of approval. Please contact Lynn Jackson in our District Office at (801) 259-6111 if you have any questions regarding the foregoing.

Sincerely yours,

*Eric Jones*

ACTING

Assistant District Manager  
for Minerals

Enclosures (6)  
Applications for Permit to Drill

cc: San Juan Resource Area (w/encl.)

LJackson:vb:4/16/91

Moab District  
P. O. Box 970  
Moab, Utah 84532

3100  
(U-51619)  
(U-62889)  
(U-62994)  
(U-62995)  
(U-62997)  
(U-065)

Mr. John Brooks  
Ampol Exploration USA, Inc.  
Seventeenth Street Plaza, Suite 3000  
1225 17th Street  
Denver, Colorado 80202

Re: Applications for Permits to Drill

JUN - 8 1990

Wells	Leases
Federal 22-5	U-51619
Federal 21-12	U-62889
Federal 33-24	U-62994
Federal 22-12	U-62994
Federal 33-9	U-62995
Federal 21-6	U-62997

San Juan County, Utah

Dear Mr. Brooks:

Based on an appeal by the Utah Chapter of the Sierra Club regarding approval of the above referenced Applications for Permits to Drill (APDs), and a subsequent remand of the case to the Moab District Bureau of Land Management by State Director decision UT-90-3 (copy enclosed), dated May 31, 1990, approvals to drill these wells are hereby rescinded.

This action is based on apparent flaws with the environmental assessment (EA) prepared for these APDs. Our intent is to re-analyze the EA in accordance with guidelines in the State Director decision. As soon as this process is complete you will be notified of our decision as to whether or not the APDs are to be re-approved or denied.

We apologize for any inconvenience this may cause. If you have questions or comments please contact Lynn Jackson at (801) 259-6111.

Sincerely yours,

/S/ WILLIAM C. STRINGER  
District Manager

ACTING

Enclosure:  
SDR UT-90-3

cc:  
U-922 (w/Encl.)  
U-069 (w/Encl.)

LJackson:py 6/6/90 Wang #2589f

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

SINGLE ZONE  MULTIPLE ZONE

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 any State requirements.)\*  
 At surface  
 NW SE Sec. 9-T34S-R15E 2,200' FSL & 2,450' FEL  
 At proposed prod. zone  
 SAME 43-027-21501

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 44.7 miles west of Blanding, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 2,400'

16. NO. OF ACRES IN LEASE  
 9,520

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

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

19. PROPOSED DEPTH  
 3,000'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5,006' GR (Est.)

22. APPROX. DATE WORK WILL START\*

5. LEASE DESIGNATION AND SERIAL NO.  
 U-62995

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

7. UNIT AGREEMENT NAME  
 N/A

8. FARM OR LEASE NAME  
 Federal

9. WELL NO.  
 33-9

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Section 9-T34S-R15E

12. COUNTY OR PARISH | 13. STATE  
 San Juan | Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	60'	100 sks Class "B"
12-1/4"	8-5/8"	24#	300'	200 sks Class "G"
6-1/4"	4-1/2"	10.5#	3,000'	165 sks Light (Lead) 150 sks Class "G" (Tail)

RECEIVED

APR 19 1991

DIVISION OF  
OIL GAS & MINING

preventer program, if any.

24. SIGNED John A. Brooks TITLE Petroleum Engineer DATE December 19, 1989

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE: \_\_\_\_\_  
 APPROVED BY William C. Stange TITLE Assistant District Manager for Minerals DATE 4/4/91

CONDITIONS OF APPROVAL, IF ANY:

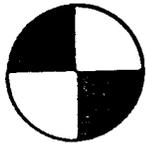
CONDITIONS OF APPROVAL ATTACHED

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A Dated 1/1/80

\*See Instructions On Reverse Side

Doc 111

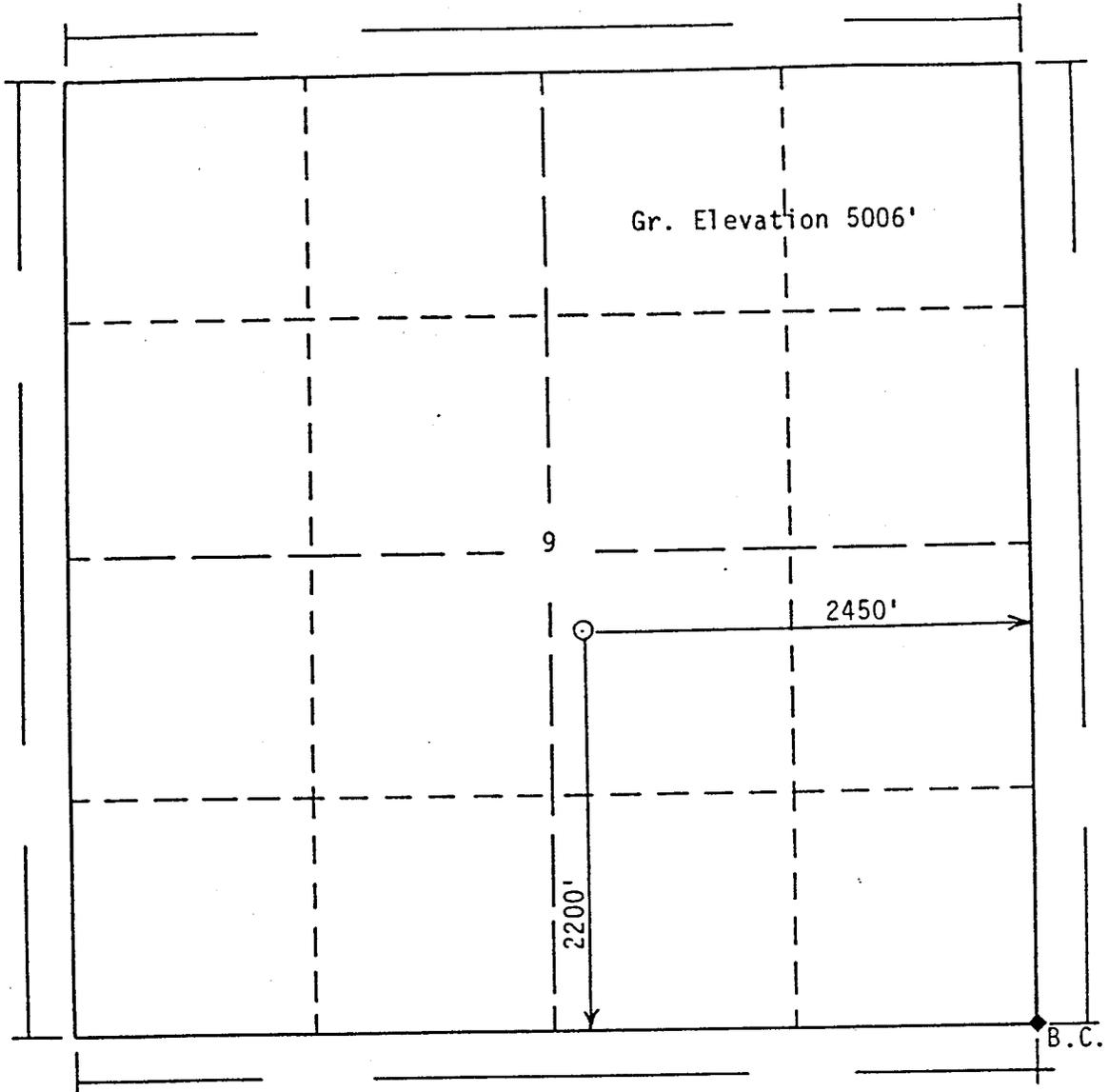
EXHIBIT A



Form PS-102

R. 15 E

N



T. 34 S

Scale: 1"=1000'

Powers Elevation, Inc. of Denver, Colorado has in accordance with a request from John Brooks for Ampol Exploration (U.S.A.) Inc. determined the location of Federal 33-9 to be 2200fs1, 2450fe1 Section 9, Township 34 S Range 15 E of the Salt Lake Principal Meridian, San Juan County, Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Federal 33-9



Date: 10-25-89

*Roy A. Rush*  
 Licensed Land Surveyor No. 8894  
 State of New Mexico

Ampolex (Texas) Inc.  
Well No. Federal 33-9  
Sec. 9, T. 34 S., R. 15 E.  
San Juan County, Utah  
Lease U-62995

#### 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 Bond No. C00701 (Principal: 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.

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

1. If unconsolidated rock is encountered, conductor shall be set ten (10) feet into underlying bedrock with cement circulated to surface.
2. If the well is productive, production casing will be cemented to surface.
3. If the Cedar Mesa Sandstone proves to be a significant fresh water aquifer, we will require future wells to have surface casing set 50 feet below the base of the Cedar Mesa Sandstone.

1. 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.
2. "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.
3. The dirt contractor will be provided with an approved copy of the surface use plan.
4. 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.

5. 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.
6. 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.
7. Contact Utah Division of Transportation to provide for warning signs at danger points along highway U-95 of heavy truck entrance, etc.
8. Water bars will be established as appropriate to reduce soil erosion.
9. Blasting of rock will not be authorized.
10. Produced water will be stored in metal or fiberglass tanks and then either hauled to an approved water disposal system or reinjected.

The following mitigation was identified in the APD by Ampolex and became part of the proposed action.

1. All operations will be conducted in such a manner that full compliance is made with applicable laws, regulations 43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations (Application for Permit Drill).
2. Approximately 4,120 feet of new road, 30 feet of maximum disturbed width, will be constructed. Flat bladed width will not exceed 20 feet.
3. The access roads will be rehabilitated or brought to BLM Resource (Class III) Road Standards within 60 days of completion of drilling operations.
4. As much topsoil as possible will be reserved at each location to be spread evenly over the area for reseeding.
5. Reserve pits will not be used at any location except 33-9 which will be used for disposal of all drill cuttings from the other 5 locations. A closed circulation system will be used at the other 5 locations for drilling purposes.
6. Hazardous or toxic materials including chromates will not be used or even be on locations.
7. On location 33-9 the reserve pit will be constructed with at least 1/2 of the capacity in cut material and will be lined with impervious native material and/or bentonite if needed. A plastic liner will not be used. There will be no blasting.
8. Three sides of the reserve pit will be fenced within 24 hours after completion of construction, and the fourth side within 24 hours after drilling operations cease, with 4 strands of barbed wire, or woven wire topped with barbed wire to a height of not less than 4 feet. If drilling operations do not commence before the pit is used for the cuttings, etc. from the other locations, the fourth side will be fenced prior to use.
9. The topsoil from the access roads will be reserved in place.
10. No liquid hydrocarbons (i.e., fuels, lubricants, or trash) will be discharged to the reserve pit.
11. No chrome compounds will be on location.
12. All potable water encountered will be reported to BLM, stating amounts and depths.
13. All trash will be placed in a trash basket and hauled to a county refuse facility as necessary. There will be no burning of trash on any of the location.

14. On a case by case review, production facilities, if necessary, will be located to reduce visual impacts from Highway U-95 and painted a BLM-approved color to best blend with the natural landscape.
15. Plans for restoration of the surface:
- A. Within 24 hours of completion of drilling, the locations and surrounding areas will be cleared of all equipment, debris, materials, and junk not required for production.
  - B. As soon as the reserve pit has dried (for location 33-9) and within 60 days for the other locations, all areas not needed for production (including access roads) will be filled in, recontoured to approximate natural contours and as much top soil as was removed replaced leaving enough for future restoration if needed.
  - C. The area will be seeded between October 1 and February 28 with the indicated species and amounts for the various locations as below:

Federal 33-9

2 lbs/acre	Indian ricegrass
2 lb/acre	Galleta
2 lb/acre	Fourwing saltbush
2 lbs/acre	Shadscale
1 lb/acre	Ephedra

Federal 22-12

2 lbs/acre	Indian ricegrass
2.5 lbs/acre	Galleta
1 lb/acre	Sand dropseed
2 lbs/acre	Fourwing saltbush
1 lb/acre	Shadscale
0.5 lb/acre	Ephedra

Federal 33-24

2 lbs/acre	Indian ricegrass
2 lbs/acre	Galleta
1 lb/acre	Sand dropseed
2 lbs/acre	Fourwing saltbush
1 lb/acre	Ephedra
1 lb/acre	Winterfat

Federal 21-12

2 lbs/acre	Indian ricegrass
1.5 lbs/acre	Galleta
1.5 lbs/acre	Sand dropseed
2 lbs/acre	Fourwing saltbush
0.5 lbs/acre	Antelope bitterbush
0.5 lbs/acre	Ephedra

Federal 21-26

2 lbs/acre	Indian ricegrass
2 lbs/acre	Galleta
0.5 lbs/acre	Sand dropseed
2.5 lbs/acre	Fourwing saltbush
0.5 lbs/acre	Antelope bitterbush
0.5 lbs/acre	Ephedra

Federal 22-5

2 lbs/acre	Indian ricegrass
2 lbs/acre	Galleta
0.5 lbs/acre	Sand dropseed
2 lbs/acre	Fourwing saltbush
2 lbs/acre	Shadscale
0.5 lbs/acre	Ephedra

- D. Seed will be drilled or broadcast. If the seed is broadcast, the seeding rates specified in C. will be doubled, and the seeding will be followed by a light harrowing.

C. INFORMATIONAL ATTACHMENT / ONSHORE OIL AND GAS ORDER NO. 2 GUIDELINES

- 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,

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 filling 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 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 or minimum limit specified within Onshore Order No. 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 test 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 centrizers 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 directions 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.

#### D. 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  $\frac{1}{4}$   $\frac{1}{4}$  section, township and range"; "Lease number".

B. Additional Requirements According To Onshore Oil and Gas Order No. 2

- 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:

xxWhen initially installed;

xxWhenever any seal subject to test pressure is broken;

xxFollowing related repairs; and

xxAt 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 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.

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 BOPE and/or 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 Assistant District Manager, Minerals Division. 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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**Ampolex (Texas), Inc.**

3. Address and Telephone No.

**1225 17th Street, Suite #3000, Denver, Colorado 80202**

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

**NW SE Section 9-T34S-R15E  
2,200' FSL & 2,450' FEL**

5. Lease Designation and Serial No.

**U-62995**

6. If Indian, Allottee or Tribe Name

--

7. If Unit or CA, Agreement Designation

--

8. Well Name and No.

**Federal #33-9**

9. API Well No.

**43-037-31501**

10. Field and Pool, or Exploratory Area

**Wildcat**

11. County or Parish, State

**San Juan County, Utah**

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

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other

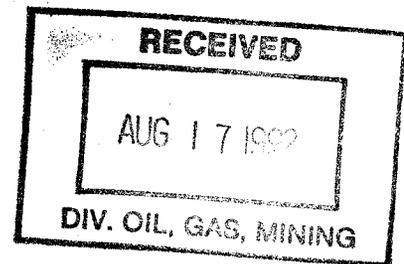
Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

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

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

Original approval of A.P.D. was rescinded in June, 1990. Approval was re-activated in January, 1992 following Interior Board of Land Appeals Decision 91-330, December, 1991.

- Point of water diversion has been changed to Highway 95 bridge north of Hite.
- Anticipated spud date is 10/01/92.
- Revised total depth is 3,315'.
- Hole size will be 7-7/8".



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

Signed Robert C. Greenaway Title Senior Petroleum Engineer Date 08/14/92

(This space for Federal or State office use)

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

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS AND MINING**

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

DATE: 8-19-92

\*See Instruction on Reverse Side

BY: [Signature]



# 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.

October 5, 1992

State of Utah  
Division of Oil and Gas  
355 W. North Temple  
Salt Lake City, Utah 84180

RECEIVED

OCT 08 1992

DIVISION OF  
OIL GAS & MINING

Re: Ampolex White Canyon Federal 33-9  
Section 9, T34S, R15E  
San Juan County, Utah

43-037-31501

Dear Sir:

Ampolex requests that all data, material, and information related to this well be kept confidential beginning on the date of receipt of this is request. It is our understanding that this period is one year from the date of completion of the well. Ampolex and its contractors will label all material as "CONFIDENTIAL" or "TIGHT HOLE".

Thank you for your attention in this matter.

Sincerely,

RAR  
Exploration Manager

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: AMPOLEX 43-037-31501

WELL NAME: FEDERAL 33-9

Section 9 Township 34S Range 15E County SAN JUAN

Drilling Contractor VECO

Rig # 2

SPUDDED: Date 10/10/92

Time

How ROTARY

Drilling will commence

Reported by BILL ELLIOT

Telephone # 1-713-261-6922

Date 10/11/92 SIGNED JLT

## STAR

Schlumberger

REPORT NO.  
125001

PAGE NO. 1

TEST DATE:  
28-OCT-1992

### Schlumberger Testing Data Report Pressure Data Report

43-037-31501  
Sec 9 T345 R15E

Of a Schlumberger Well Test  
*NESE 2200 FSL 2450 FEL*

COMPANY: AMPOLEX (USA), INC.		WELL: FEDERAL #33-9 - DST #1																												
<b>TEST IDENTIFICATION</b> Test Type ..... MFE-OH-DST Test No. .... ONE Formation ..... UPPER ISMAY Test Interval (ft) ..... 2368 to 2394 Depth Reference ..... GL		<b>WELL LOCATION</b> Field ..... WHITE CANYON County ..... SAN JUAN State ..... UTAH Sec/Twn/Rng ..... 9/T345/R15E Elevation (ft) ..... 5006																												
<b>HOLE CONDITIONS</b> Total Depth (MD/TVD) (ft) .... 2394 Hole Size (in) ..... 7.875 Casing/Liner I.D. (in) ..... Tested Interval/Net Pay (ft) .. 26 / 15		<b>MUD PROPERTIES</b> Mud Type ..... POLYMER Mud Weight (lb/gal) ..... 8.8 Mud Resistivity (ohm.m) ..... 6.5 @ 68F Filtrate Resistivity (ohm.m) .. 6.3 @ 68F Filtrate Chlorides (ppm) ..... 900																												
<b>INITIAL TEST CONDITIONS</b> Initial Hydrostatic (psi) .... 1160 Gas Cushion Type ..... Surface Pressure (psi) ..... Liquid Cushion Type ..... Cushion Length (ft) .....		<b>TEST STRING CONFIGURATION</b> Pipe Length (ft)/I.D. (in) ... 1839 / 2.25 Collar Length (ft)/I.D. (in) .. 484 / 2.25 Packer Depths (ft) ..... 2362, 2368 Bottomhole Choke Size (in) ... 0.92 Gauge Depth (ft)/Type ..... 2374/MECH.																												
<b>NET PIPE RECOVERY</b> <table border="1"> <thead> <tr> <th>Volume</th> <th>Fluid Type</th> <th>Properties</th> </tr> </thead> <tbody> <tr> <td>130 ft</td> <td>MC WATER:</td> <td></td> </tr> <tr> <td></td> <td>TOP</td> <td>Rw1.5@68F 4000ppm</td> </tr> <tr> <td></td> <td>MIDDLE</td> <td>Rw2.2@68F 3200ppm</td> </tr> <tr> <td></td> <td>BOTTOM</td> <td>Rw1.8@68F 3800ppm</td> </tr> </tbody> </table>		Volume	Fluid Type	Properties	130 ft	MC WATER:			TOP	Rw1.5@68F 4000ppm		MIDDLE	Rw2.2@68F 3200ppm		BOTTOM	Rw1.8@68F 3800ppm	<b>NET SAMPLE CHAMBER RECOVERY</b> <table border="1"> <thead> <tr> <th>Volume</th> <th>Fluid Type</th> <th>Properties</th> </tr> </thead> <tbody> <tr> <td>0.12 cuft</td> <td>Gas</td> <td></td> </tr> <tr> <td>TRACE</td> <td>Oil</td> <td></td> </tr> <tr> <td>2000 cc</td> <td>Water</td> <td>Rw1.3@68F 5200ppm</td> </tr> </tbody> </table> <p>Pressure: 70      GOR:      GLR: 10</p>		Volume	Fluid Type	Properties	0.12 cuft	Gas		TRACE	Oil		2000 cc	Water	Rw1.3@68F 5200ppm
Volume	Fluid Type	Properties																												
130 ft	MC WATER:																													
	TOP	Rw1.5@68F 4000ppm																												
	MIDDLE	Rw2.2@68F 3200ppm																												
	BOTTOM	Rw1.8@68F 3800ppm																												
Volume	Fluid Type	Properties																												
0.12 cuft	Gas																													
TRACE	Oil																													
2000 cc	Water	Rw1.3@68F 5200ppm																												
<b>INTERPRETATION RESULTS</b> Model of Behavior ..... Fluid Type Used for Analysis.. Reservoir Pressure (psi) ..... Transmissibility (md.ft/cp) .. Effective Permeability (md) .. Skin Factor/Damage Ratio ..... Storativity Ratio, Omega ..... Interporos.Flow Coef., Lambda.. Distance to an Anomaly (ft) .. Radius of Investigation (ft) .. Potentiometric Surface (ft) ..		<b>ROCK/FLUID/WELLBORE PROPERTIES</b> Oil Density (deg. API) ..... Basic Solids (%) ..... Gas Gravity ..... GOR (scf/STB) ..... Water Cut (%) ..... Viscosity (cp) ..... Total Compressibility (1/psi). Porosity (%) ..... 2 Reservoir Temperature (F) .... 82 Form.Vol.Factor (bbl/STB) ....																												

### PRODUCTION RATE DURING TEST: Data Report

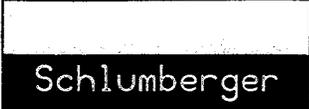
#### COMMENTS:

THIS DRILLSTEM TEST WAS MECHANICALLY SUCCESSFUL. THE ZONE PRODUCED MUD CUT WATER INTO THE DRILLSTRING AND WATER WITH A TRACE OF OIL AND SOME GAS INTO THE SAMPLE CHAMBER DURING THE TEST. THE SHUTIN PLOTS SUGGEST THAT THE ZONE HAS LOW EFFECTIVE PERMEABILITY AND SOME WELLBORE DAMAGE AT THE TIME OF THE TEST.

THANK YOU FOR CHOOSING SCHLUMBERGER. FOR QUESTIONS ABOUT THIS REPORT, PLEASE CONTACT CLIFF RICHARDS AT (801) 789-3394 OR DEBORA HALLFORD AT (303) 375-8118.

**RECEIVED**

SEQUENCE OF EVENTS



DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
28-OCT	05:38	SET PACKERS	-5	1160	
	05:43	START FLOW - 1/4" CHOKE 1/2" BLOW IN BUCKET	0	25	
	05:58	NO BLOW IN BUCKET	15		
	06:03	1/8" BLOW IN BUCKET FOR BALANCE OF FLOW PERIOD	20		
	06:13	END FLOW & START SHUTIN	30	44	
	07:13	END SHUTIN	90	434	
	07:19	START FLOW SLIGHT BLOW IN BUCKET DURING 90 MINUTE FINAL FLOW PERIOD.	96	53	
	08:49	END FLOW & START SHUTIN	186	89	
	11:49	END SHUTIN	366	436	
	12:03	PULLED PACKERS LOOSE	380	1115	

DISTRIBUTION OF REPORTS

Schlumberger

SCHLUMBERGER has sent copies of this report to the following:

=====

AMPOLEX (USA), INC.  
1225 17TH STREET  
SUITE 3000  
DENVER, CO 80202  
Attn: PAUL MATHENY  
( 2 copies)

ARCO OIL & GAS CO.  
1601 BRYAN STREET  
BOX 2819  
DALLAS, TX 75201  
Attn: BILL MONTGOMERY  
( 2 copies)

ARCO OIL & GAS CO.  
ROOM M 10-769-39  
600 N. MARIENFIELD  
MIDLAND, TX 79701  
Attn: ROBERT TUBBS  
( 4 copies)

STATE OF UTAH  
DIVISION OF OIL & GAS  
355 W. TEMPLE  
SALT LAKE CITY, UT 84180  
( 2 copies)

BUREAU OF LAND MANAGEMENT  
DISTRICT OFFICE  
P.O. BOX 970  
MOAB, UT 84532  
( 2 copies)

JOE SHIMKA  
573 BENTWOOD STREET  
GRAND JUNCTION, CO 81504  
( 1 copy)

Any interpretations or recommendations are opinions and necessarily based on inferences and empirical factors and assumptions, which are not infallible. Accordingly, Schlumberger (Flopetro Johnston) cannot and does not warrant the accuracy of correctness of any interpretation or measurement. Under no circumstances should any interpretation or measurement be relied upon as the sole basis for any drilling, completion, well treatment or production decision or any procedure involving risk to the safety of any drilling venture, drilling rig or its crew or any other individual. The Customer has full responsibility for all drilling, completion, well treatment, and production procedure, and all other activities relating to the drilling or production operation.

# BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 125001

COMPANY : AMPOLEX (USA) INC

INSTRUMENT NO. 1243

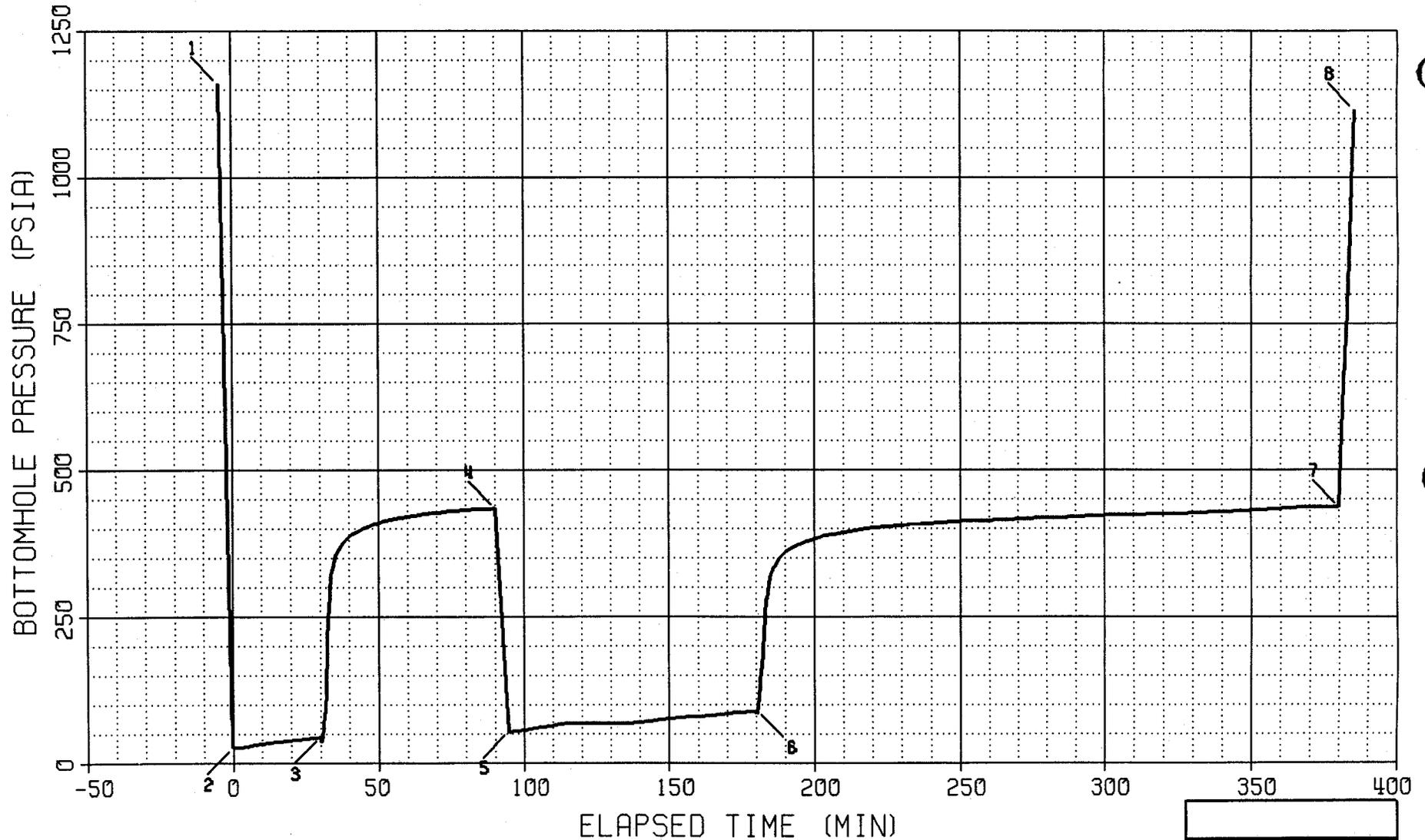
WELL : FEDERAL 33-9

DEPTH : 2374 FT

CAPACITY : 2800 PSI

MECHANICAL GAUGE PRESSURE DATA

PORT OPENING : OUTSIDE



# LOG LOG PLOT

COMPANY : AMPOLEX (USA) INC

WELL : FEDERAL 33-9

FIELD REPORT NO. 125001

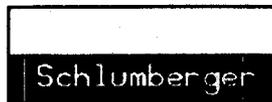
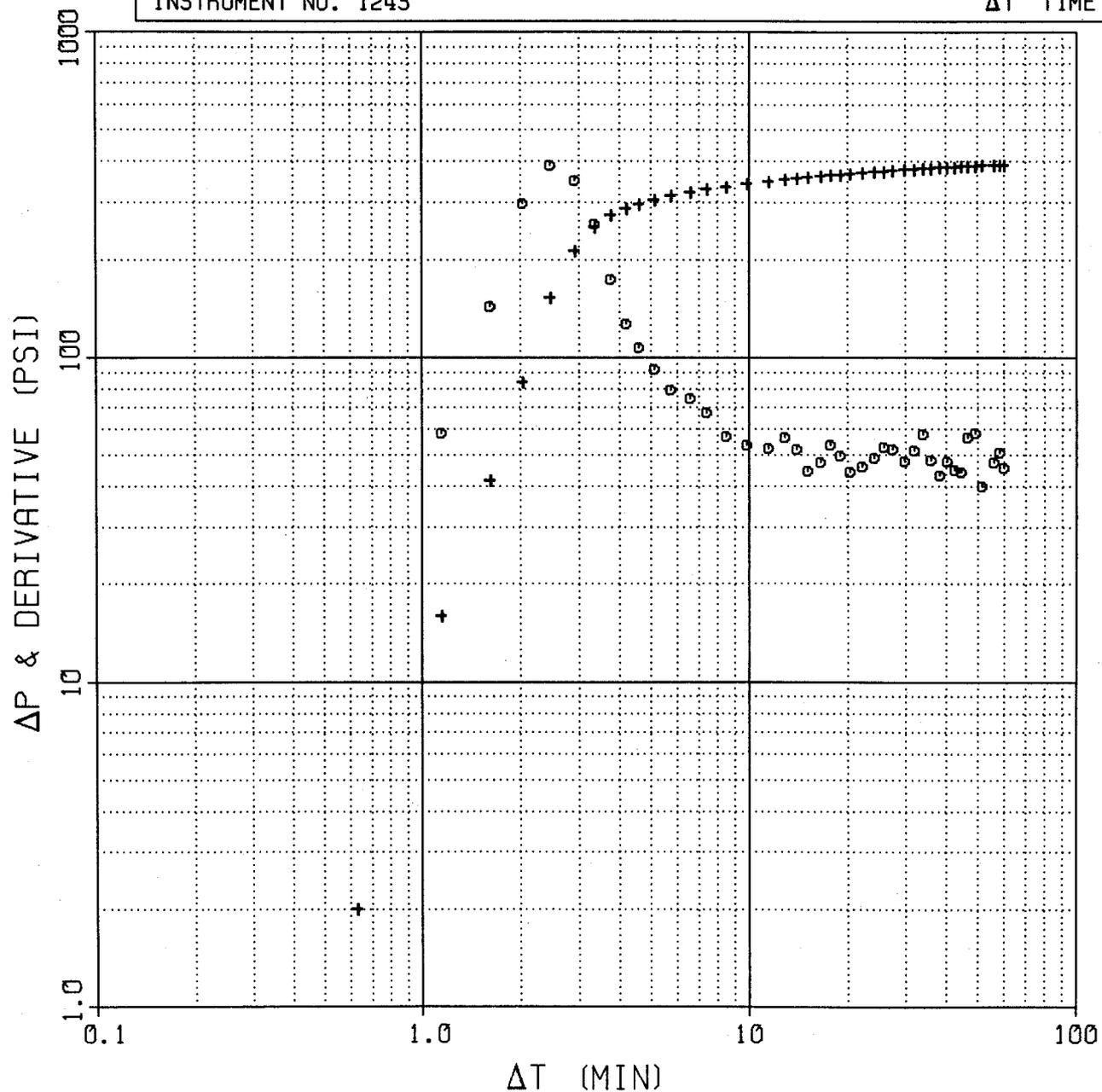
INSTRUMENT NO. 1243

SHUTIN #1 : PRODUCING TIME ( $T_p$ ): 30.0 MIN

FINAL FLOW PRESSURE ( $P_{wf}$ ): 44 PSIA

PLOT ELAPSED TIME RANGE: 30.6 TO 90.0 MIN

$\Delta T$  TIME RANGE: 0.6 TO 60.0 MIN



$\Delta T$  (MIN)

0.095 0.17 0.30 0.54 0.98 1.8 3.3 6.5 14 39  $\infty$

# HORNER PLOT

FIELD REPORT NO. 125001  
INSTRUMENT NO. 1243

COMPANY : AMPOLEX (USA) INC  
WELL : FEDERAL 33-9

SHUTIN #1 : FINAL FLOW PRESSURE ( $P_{wf}$ ) : 44 PSIA

PLOT ELAPSED TIME RANGE: 30.3 TO 90.0 MIN

$\Delta T$  TIME RANGE: 0.3 TO 60.0 MIN

PRODUCING TIME ( $T_p$ ) : 30.0 MIN

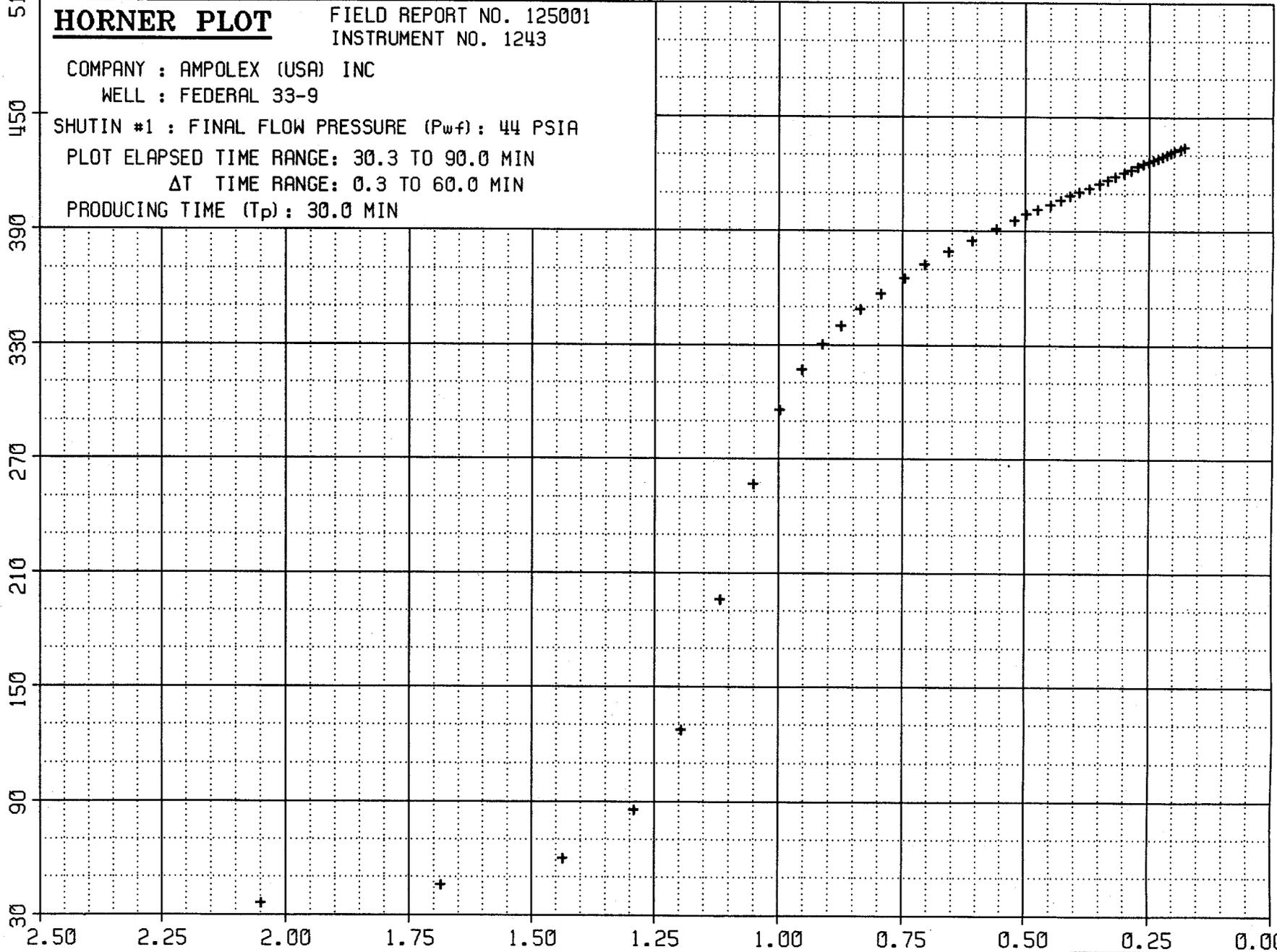
PRESSURE (PSIA)

510  
450  
390  
330  
270  
210  
150  
90  
30

2.50 2.25 2.00 1.75 1.50 1.25 1.00 0.75 0.50 0.25 0.00

$\text{LOG} \left[ \frac{(T_p + \Delta T)}{\Delta T} \right]$

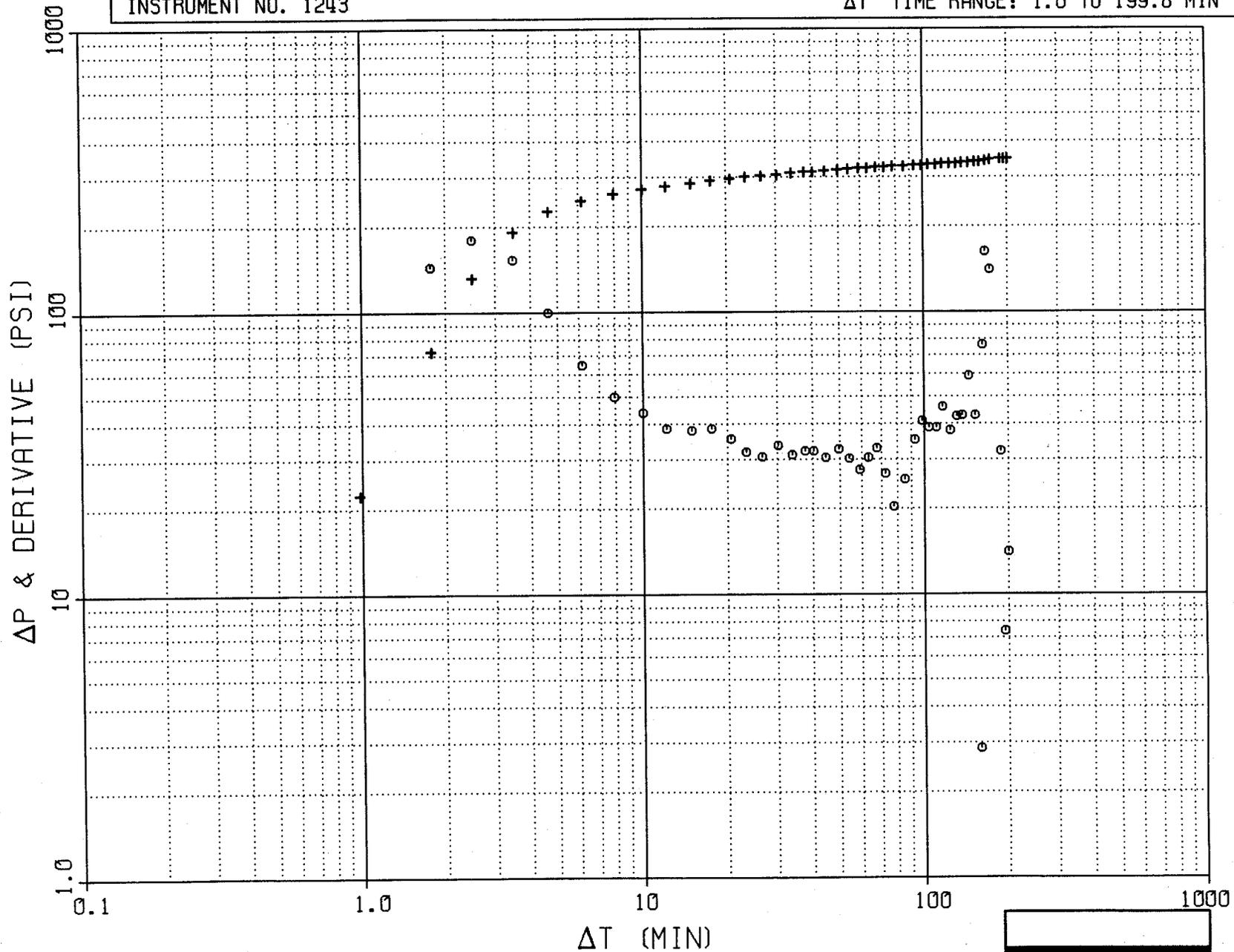
Schlumberger



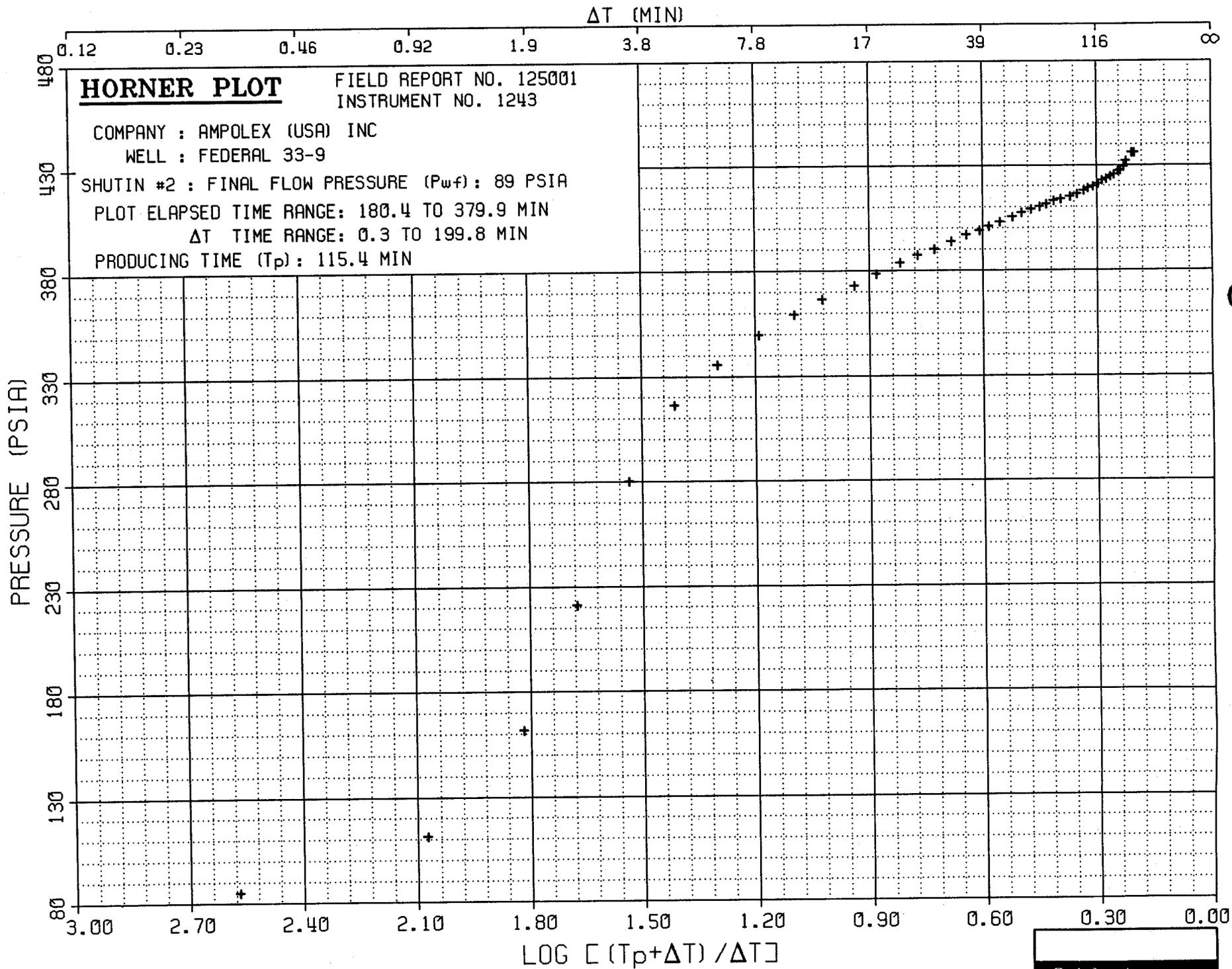
# LOG LOG PLOT

COMPANY : AMPOLEX (USA) INC  
WELL : FEDERAL 33-9  
FIELD REPORT NO. 125001  
INSTRUMENT NO. 1243

SHUTIN #2 : PRODUCING TIME ( $T_p$ ): 115.4 MIN  
FINAL FLOW PRESSURE ( $P_{wf}$ ): 89 PSIA  
PLOT ELAPSED TIME RANGE: 181.1 TO 379.9 MIN  
 $\Delta T$  TIME RANGE: 1.0 TO 199.8 MIN



Schlumberger



\*\*\*\*\*  
 \*\* WELL TEST DATA PRINTOUT \*\*  
 \*\*\*\*\*

COMPANY: AMPOLEX (USA) INC  
 WELL: FEDERAL 33-9

FIELD REPORT NO. 125001  
 INSTRUMENT NO. 1243

RECORDER CAPACITY: 2800 PSI    PORT OPENING: OUTSIDE    DEPTH: 2374 FT  
 TEMPERATURE: 82 DEG F

LABEL POINT INFORMATION  
 \*\*\*\*\*

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA
1	5:38:40	28-OCT	HYDROSTATIC MUD	-4.33	1160
2	5:43:00	28-OCT	START FLOW	0.00	25
3	6:13:00	28-OCT	END FLOW & START SHUT-IN	30.00	44
4	7:13:00	28-OCT	END SHUT-IN	90.00	434
5	7:17:40	28-OCT	START FLOW	94.67	53
6	8:43:05	28-OCT	END FLOW & START SHUT-IN	180.08	89
7	12:02:51	28-OCT	END SHUT-IN	379.85	436
8	12:08:22	28-OCT	HYDROSTATIC MUD	385.37	1115

SUMMARY OF FLOW PERIODS  
 \*\*\*\*\*

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	0.00	30.00	30.00	25	44	25
2	94.67	180.08	85.41	53	89	53

SUMMARY OF SHUTIN PERIODS  
 \*\*\*\*\*

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	30.00	90.00	60.00	44	434	44	30.00
2	180.08	379.85	199.77	89	436	89	115.41

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
5:43:00	28-OCT	0.00	0.00	25
5:58:44	28-OCT	15.73	15.73	36
6:13:00	28-OCT	30.00	30.00	44

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 44 PSIA  
PRODUCING TIME = 30.00 MIN

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
6:13:00	28-OCT	30.00	0.00	44	0	
6:14:08	28-OCT	31.14	1.14	60	16	1.4364
6:15:28	28-OCT	32.47	2.47	196	152	1.1188
6:16:45	28-OCT	33.75	3.75	317	273	0.9542
6:18:06	28-OCT	35.10	5.10	348	305	0.8377
6:19:34	28-OCT	36.56	6.56	365	321	0.7461
6:21:28	28-OCT	38.46	8.46	379	335	0.6576
6:22:48	28-OCT	39.80	9.80	385	341	0.6087
6:24:25	28-OCT	41.41	11.41	391	347	0.5598
6:27:00	28-OCT	44.00	14.00	399	355	0.4973
6:29:31	28-OCT	46.52	16.52	404	360	0.4496
6:31:58	28-OCT	48.96	18.96	408	364	0.4120
6:35:12	28-OCT	52.20	22.20	412	369	0.3713
6:38:46	28-OCT	55.76	25.76	416	373	0.3354
6:42:46	28-OCT	59.76	29.76	420	376	0.3028
6:44:56	28-OCT	61.93	31.93	422	378	0.2877
6:51:08	28-OCT	68.13	38.13	426	382	0.2521
6:57:31	28-OCT	74.52	44.52	429	385	0.2237
7:04:26	28-OCT	81.43	51.43	432	388	0.1996
7:11:20	28-OCT	88.34	58.34	434	390	0.1802
7:13:00	28-OCT	90.00	60.00	434	390	0.1761

TEST PHASE: FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
7:17:40	28-OCT	94.67	0.00	53
7:35:24	28-OCT	112.40	17.73	65
7:51:06	28-OCT	128.10	33.43	68
8:06:43	28-OCT	143.71	49.04	72
8:23:23	28-OCT	160.38	65.71	80
8:42:38	28-OCT	179.63	84.96	88
8:43:05	28-OCT	180.08	85.41	89

TEST PHASE: SHUTIN PERIOD # 2

FINAL FLOW PRESSURE = 89 PSIA  
PRODUCING TIME = 115.41 MIN

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
8:43:05	28-OCT	180.08	0.00	89	0	
8:44:51	28-OCT	181.85	1.77	161	73	1.8209
8:46:32	28-OCT	183.54	3.46	280	191	1.5360
8:47:43	28-OCT	184.72	4.64	316	227	1.4128
8:49:11	28-OCT	186.18	6.10	335	246	1.2993
8:51:02	28-OCT	188.03	7.95	349	260	1.1908
8:53:07	28-OCT	190.11	10.03	359	270	1.0971
8:55:09	28-OCT	192.15	12.07	366	277	1.0237
8:58:01	28-OCT	195.02	14.94	373	284	0.9408
9:00:33	28-OCT	197.55	17.47	378	289	0.8812
9:03:43	28-OCT	200.72	20.64	384	295	0.8190
9:06:26	28-OCT	203.43	23.35	387	298	0.7740
9:09:37	28-OCT	206.62	26.54	390	301	0.7282
9:13:13	28-OCT	210.21	30.13	394	305	0.6840
9:20:47	28-OCT	217.78	37.70	399	310	0.6087
9:27:42	28-OCT	224.70	44.62	403	314	0.5547
9:36:59	28-OCT	233.99	53.91	407	318	0.4970
9:46:10	28-OCT	243.17	63.09	410	321	0.4517
9:55:38	28-OCT	252.64	72.56	413	324	0.4134
10:08:11	28-OCT	265.19	85.11	415	326	0.3722
10:15:21	28-OCT	272.35	92.27	416	327	0.3523
10:21:55	28-OCT	278.92	98.84	418	329	0.3360
10:26:59	28-OCT	283.99	103.91	419	330	0.3244
10:33:10	28-OCT	290.16	110.08	420	331	0.3114
10:39:46	28-OCT	296.77	116.69	421	332	0.2986
10:47:06	28-OCT	304.10	124.02	423	334	0.2857
10:53:36	28-OCT	310.60	130.52	423	334	0.2751
11:00:21	28-OCT	317.35	137.27	425	336	0.2650
11:07:42	28-OCT	324.70	144.62	425	336	0.2548
11:15:05	28-OCT	332.08	152.00	427	338	0.2453
11:21:28	28-OCT	338.46	158.38	427	338	0.2377
11:29:09	28-OCT	346.15	166.07	429	340	0.2292
11:35:57	28-OCT	352.95	172.87	432	343	0.2221
11:51:13	28-OCT	368.22	188.14	436	347	0.2077
12:02:51	28-OCT	379.85	199.77	436	347	0.1980

WELL TEST INTERPRETATION REPORT #:125001		PAGE: 12,
CLIENT : AMPOLEX ( ) , INC.		29-OCT-92
REGION : WESTERN	DISTRIBUTION OF REPORTS	FIELD: WHITE CANYON
DISTRICT: VERNAL		ZONE : UPPER ISMAY
BASE : DENVER		WELL : FEDERAL #33-9
ENGINEER: C. RICHARDS		LOCATION: 9/T34S/R15E

SCHLUMBERGER has sent copies of this report to the following:

AMPOLEX (USA), INC.  
1225 17TH STREET  
SUITE 3000  
DENVER, CO 80202  
Attn: PAUL MATHENY  
( 2 copies)

ARCO OIL & GAS CO.  
1601 BRYAN STREET  
BOX 2819  
DALLAS, TX 75201  
Attn: BILL MONTGOMERY  
( 2 copies)

ARCO OIL & GAS CO.  
ROOM M 10-769-39  
600 N. MARIENFIELD  
MIDLAND, TX 79701  
Attn: ROBERT TUBBS  
( 4 copies)

STATE OF UTAH  
DIVISION OF OIL & GAS  
355 W. TEMPLE  
SALT LAKE CITY, UT 84180  
( 2 copies)

BUREAU OF LAND MANAGEMENT  
DISTRICT OFFICE  
P.O. BOX 970  
MOAB , UT 84532  
( 2 copies)

JOE SHIMKA  
573 BENTWOOD STREET  
GRAND JUNCTION, CO 81504  
( 1 copy)

Any interpretations or recommendations are opinions and necessarily based on inferences and empirical factors and assumptions, which are not infallible. Accordingly, Schlumberger (Flopetrol Johnston) cannot and does not warrant the accuracy of correctness of any interpretation or measurement. Under no circumstances should any interpretation or measurement be relied upon as the sole basis for any drilling, completion, well treatment or production decision or any procedure involving risk to the safety of any drilling venture, drilling rig or its crew or any other individual. The Customer has full responsibility for all drilling, completion, well treatment, and production procedure, and all other activities relating to the drilling or production operation.

FAX #  
297-2050

PROCESSING FOR TICKET NUMBER 125001 on 10/29/1992 17:28:38

-----  
Company: AMPOLEX (USA), INC.  
Test type: DST  
Technician: C. RICHARDS

Well: FEDERAL #33-9 - DST #1  
Report type: PDR, (Level 1)  
District: VERNAL  
-----

Checking for Label point and Pressure files

WARNING ---- OWNER NAME or WELL NAME Between files do not compare!

Tkt: AMPOLEX (USA), INC.

FEDERAL #33-9 - DST #1

P01: AMPOLEX (USA) INC

FEDERAL 33-9

Found 125001.P01 and 125001.L01

Checking flow and shutin period delta times correspond between files

Below, warnings only printed if more than two minute varience + or -:

Delta time Flow #2, for Surface Info vs 125001.P01 off by 4.59 min

Delta time Shutin #2, for Surface Info vs 125001.P01 off by -19.77 min  
-----

Creating Master Analysis log files  
-----

Creating ISS OPT file: 125001.opt

Gauge number used and on cover page is 1243 at depth 2374 ft

Pages of distribution are 1 for 6 frames  
-----

WARNING --- Resistivity and Chlorides do not agree for sampler water.  
For Salinity of 5200 ppm,  
Resistivity should be 1.1670 ohm-meters at 68 degF

WARNING --- Resistivity Temperature is not included for muf filtrate!  
Salinity and Resisitivity measures are not checked!

WARNING --- Resistivity Temperature is not included for muf filtrate!  
Salinity and Resisitivity measures are not checked!

WARNING --- Resistivity and Chlorides do not agree for recovery water.  
For Salinity of 3200 ppm,  
Resistivity should be 1.8479 ohm-meters at 68 degF

WARNING --- Resistivity and Chlorides do not agree for recovery water.  
For Salinity of 3800 ppm,  
Resistivity should be 1.5698 ohm-meters at 68 degF  
-----

REMARKS for CLIENT on test ticket  
-----

COMMENTS for ANALYST

end ----- trans.exe ----- Version 3.1 July 1991 ----- 17:28:39

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-62995**

6. If Indian, Allottee or Tribe Name  
--

7. If Unit or CA, Agreement Designation  
--

8. Well Name and No.  
**Federal #33-9**

9. API Well No.  
**43-037-31501**

10. Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**San Juan County, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well    Gas Well    Other

2. Name of Operator  
**Ampolex (Texas), Inc.**

3. Address and Telephone No.  
**1225 17th Street, Suite #3000, Denver, CO 80202 (303) 297-1000**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2,200' FSL & 2,450' FEL**  
**NW SE Section 9-~~T24S~~-R15E**  
**34S**

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

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

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

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

1. 13-3/8" conductor pie set @ 44' KB instead of 60' as per A.P.D.
2. Total depth revised to 3,400' instead of 3,315' as per A.P.D.
3. Choke manifold outlet on BOP stack is 2" O.D. instead of 3" O.D. as per A.P.D.

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

**RECEIVED**

DATE: 11-9-92 NOV 06 1992

BY: [Signature] DIVISION OF  
OIL GAS & MINING

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

Signed Robert C. Greenberg Title Senior Petroleum Engineer Date 11/02/92

(This space for Federal or State office use)

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

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



RECEIVED

NOV 06 1992

DIVISION OF  
OIL GAS & MINING

CONFIDENTIAL

WATER ANALYSIS REPORT

REPORT #: 920360

COMPANY: AMPOLEX (U.S.A.), Inc.

ADDRESS: DENVER, CO *Sec 9, 34S, 15E 43-03T-31501*

REPORT FOR: MR. PAUL MATHENY

CC: MR. BILL MONTGOMERY

CC: MR. ROBERT TUBBS

CC: MR. JERRY SOVICH

FIELD/LEASE: WHITE CANYON

DATE SAMPLED:

DATE RECEIVED: 10-29-92

DATE REPORTED: 11-3-92

SERVICE ENGINEER: MIKE ANGUS

CHEMICAL COMPONENT	FED 33-9 SAMP CHAMBER	FED 33-9 BOTTOM	FED 33-9 MIDDLE	FED 33-9 TOP
CHLORIDE	2600	1800	1100	
SULFATE				SAMPLE
CARBONATE				TURBID
BICARBONATE	3050	3900	4800	
CALCIUM	104	56	31	NO
MAGNESIUM	58	58	38	FILTRATE
IRON	0.5	1	7.3	
BARIUM	ND	ND	ND	
STRONTIUM	ND	ND	ND	
SODIUM	2606	2463	2414	0
pH	6.86	7.09	7.19	7.25
IONIC STRENGTH	0.13	0.12	0.11	0.00
SPECIFIC GRAVITY	1.00	1.00	1.00	1.00
SI@20C (68F)	0.31	0.40	0.35	ERR
SI@25C (77F)	0.44	0.54	0.49	ERR
SI@30C (86F)	0.57	0.67	0.62	ERR
SI@40C (104F)	0.82	0.91	0.86	ERR
SI@50C (122F)	0.97	1.07	1.02	ERR
SI@60C (140F)	1.25	1.34	1.29	ERR
SI@70C (158F)	1.37	1.46	1.40	ERR
SI@80C (176F)	1.67	1.75	1.69	ERR
SI@90C (194F)	1.90	1.97	1.91	ERR
TDS (MGS/L)	8418	8277	8383	0
TEMPERATURE (F)				
DISSOLVED H2S	ND	ND	ND	
DISSOLVED CO2	ND	ND	ND	

RESISTIVITY .1488 OHMS

.1953 OHMS

SI (TOMSON-ODDO) -2.55

ANALYST: R. BARNES



# 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

November 18, 1992

Carolyn Small  
Ampolex (Texas) Inc.  
1225 17th Street, Suite 3000  
Denver, Colorado 80202

Dear Ms. Small:

Re: Request for Completed Entity Action Form - Federal 33-9  
NWSE Sec. 9, T. 34S, R. 15E - San Juan County, Utah

This is written to remind you that all well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of spudding a new well. This office was notified that your company spudded the Federal 33-9, API Number 43-037-31501, on October 10, 1992. At this time, we have not received an Entity Action Form for this well.

Please review the instructions on the back of the enclosed form. Make sure you choose the proper Action Code to show whether the well will be a single well with its own sales facilities (Code A), a well being added to an existing group of wells having the same tank battery and common division of royalty interest (Code B - show existing Entity Number to which well should be added), or a well being drilled in the participating area of a properly designated unit (Code B). Complete the form and return it to us by November 27, 1992.

Your attention to this matter is appreciated. If we can be of assistance to you, please feel free to call Lisha Romero at the above number.

Sincerely,

Don Staley  
Administrative Supervisor

Enclosure  
cc: R. J. Firth  
File

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other In-  
struction  
rev.

5. LEASE DESIGNATION AND SERIAL NO.

U-62995

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

33-9

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 9-T34S-R15E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

**CONFIDENTIAL**

**RECEIVED**

DEC 16 1992

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

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

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

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface 2,200' FSL & 2,450' FEL

At top prod. Interval reported below

At total depth SAME

14. PERMIT NO. 43-037-31501 DATE ISSUED 04/04/91Z

15. DATE SPUDDED 10/10/92 16. DATE T.D. REACHED 11/02/92 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5,006' GR 19. ELEV. CASINGHEAD.

20. TOTAL DEPTH, MD & TVD 3,400' 21. PLUG, BACK T.D., MD & TVD Surface 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN DLL/MSFL, LSS, FDC-CNL 11-9-92 27. WAS WELL CORED NO

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

CASINO SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48	44'	17-1/2"	100	0
9-5/8"	36	310'	12-1/4"	490	0

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORDED (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

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

33.\* PRODUCTION

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

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

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

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

35. LIST OF ATTACHMENTS

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

SIGNED Robert C. Arceneaux Senior Petroleum Engineer DATE 12/14/92

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

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);

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
DST #1 ISMAY	2,368'	2,394'	Recovered 130' Mud cut water	Cedar Mesa	Surface	
				Halgaito	1,004'	
				Hermosa	1,504'	
				Desert Creek	2,574'	
				Chimney Rock	2,658'	
				Akah	2,677'	
				Molas	3,280'	
				Leadville	3,364'	

*Conf.*

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

OPERATOR ACCT. NO. N0385

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
✓A	99998	—	43-037-31501	Federal #33-9	NW SE	9	34S	15E	San Juan	10/10/92	
WELL 1 COMMENTS: Plugged and abandoned 11/05/92											
✓A	99999	—	43-037-31500	Federal #22-5	SE NW	5	34S	15E	San Juan	10/31/92	
WELL 2 COMMENTS: Rig released 11/27/92. Waiting on completion. Commenced completion 12/16/92. Preparing to plug and abandon. *Awaiting wcr.											
✓A	99999	11457	43-037-31483	State #32-160	SW NE	16	35S	15E	San Juan	11/15/92	
WELL 3 COMMENTS: Rig released 12/10/92. Waiting on completion. *Entity added 1-13-93. JLP											
✓A	99999	11458	43-037-31482	State #11-36	NW NW	36	34S	15E	San Juan	11/30/92	
WELL 4 COMMENTS: Temporarily Abandoned 12/17/92 *Entity added 1-13-93. JLP											
✓A	99999	—	43-037-31503	Federal #21-12	NE NW	12	36S	15E	San Juan	12/12/92	
WELL 5 COMMENTS: Plugged and abandoned 12/30/92 *Awaiting wcr.											

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**

JAN 07 1993

DIVISION OF  
OIL GAS & MINING

*Dinah Carrasco*  
Signature  
Dinah Carrasco  
Operations Secretary 1/5/93  
Title Date

Phone No. (303) 297-1000

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-62995**

6. If Indian, Allottee or Tribe Name  
--

7. If Unit or CA, Agreement Designation  
--

8. Well Name and No.  
**Federal #33-9**

9. API Well No.  
**43-037-31501**

10. Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**San Juan County, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other    **DRY HOLE**

2. Name of Operator  
**Ampolex (Texas), Inc.**

3. Address and Telephone No.  
**1225 17th Street, Suite #3000, Denver, CO 80202 (303) 297-1000**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2,200' FSL & 2,450' FEL**  
**NW SE Section 9-T24S-R15E**

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

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

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

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

Well was plugged as follows:

- PLUG #1: 3,395' - 3,295' 36 sx
- PLUG #2: 2,612' - 2,362' 114 sx
- PLUG #3: 1,075' - 925' 49 sx - Attempted to tag - Cement not set.
- PLUG #4: 985' - 900' 30 sx - Additional plug
- PLUG #5: 369' - 269' 32 sx
- PLUG #6: 50' - Surface 19 sx

Cut off casing and installed dry hole marker. Well Plugged and abandoned

Plugging witnessed by Mr. Jeff Brown with the BLM.

**RECEIVED**

FEB 24 1993

DIVISION OF  
OIL GAS & MINING

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

Signed Robert L. Arnesen Senior Petroleum Engineer Date 02/19/93

(This space for Federal or State office use)

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

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

\*See Instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

5. Lease Designation and Serial No.  
**U-62995**

6. If Indian, Allottee or Tribe Name  
--

7. If Unit or CA, Agreement Designation  
--

8. Well Name and No.  
**Federal #33-9**

9. API Well No.  
**43-037-31501**

Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**San Juan County, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other    **DRY HOLE**

2. Name of Operator  
**Ampolex (Texas), Inc.**

3. Address and Telephone No.  
**1225 17th Street, Suite #3000, Denver, Colorado 80202 (303) 297-1000**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2,200' FSL & 2,450' FEL**  
**NW SE Section 9-T24S-R15E T345**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent <input type="checkbox"/> Subsequent Report <input checked="" type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose Water <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

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

The drillsite of the captioned well has been restored and re-seeded as per the provisions of the A.P.D. Reclamation work was completed on 02/25/93.

**RECEIVED**  
MAR 04 1993  
DIVISION OF  
OIL GAS & MINING

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

Signed Robert C. Arceneaux Title Senior Petroleum Engineer Date 03/02/93

(This space for Federal or State office use)

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

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

\*See Instruction on Reverse Side