

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, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface: 2052' FNL 2183' FWL *SENW*  
 At proposed prod. zone: 2383' FNL 2121' FWL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 See Topo Map "A"

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 2121' (Btm. Hole)

16. NO. OF ACRES IN LEASE  
 960

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 320

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

19. PROPOSED DEPTH  
 5950'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DP, RT, GR, etc.)  
 5741' GR.

22. APPROX. DATE WORK WILL START\*  
 A.S.A.P.

5. LEASE DESIGNATION AND SERIAL NO.  
 U-62681

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

7. UNIT AGREEMENT NAME  
 Quantum

8. FARM OR LEASE NAME  
 Quantum

9. WELL NO.  
 1

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
 Sec. 20, T36S, R24E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36 K-55	1700'	To Surface
8 3/4"	5 1/2"	17 K-55	T.D.	T.O.C. above all pay zones

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

Bond coverage for this well is provided by Nationwide Surety #69HF3973.

**RECEIVED**  
 JUL 27 1992  
 DIVISION OF  
 OIL GAS & MINING

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

24. APPROVED BY THE STATE OF UTAH DIVISION OF OIL GAS AND MINING  
 DATE: 7-11-92

SIGNED: Robert C. Acenenas TITLE: Senior Petroleum Engineer

(This space for Federal or State office use)

PERMIT NO. 43-037-31688 APPROVAL DATE: 7-11-92

WELL SPACING: 2649-2.3

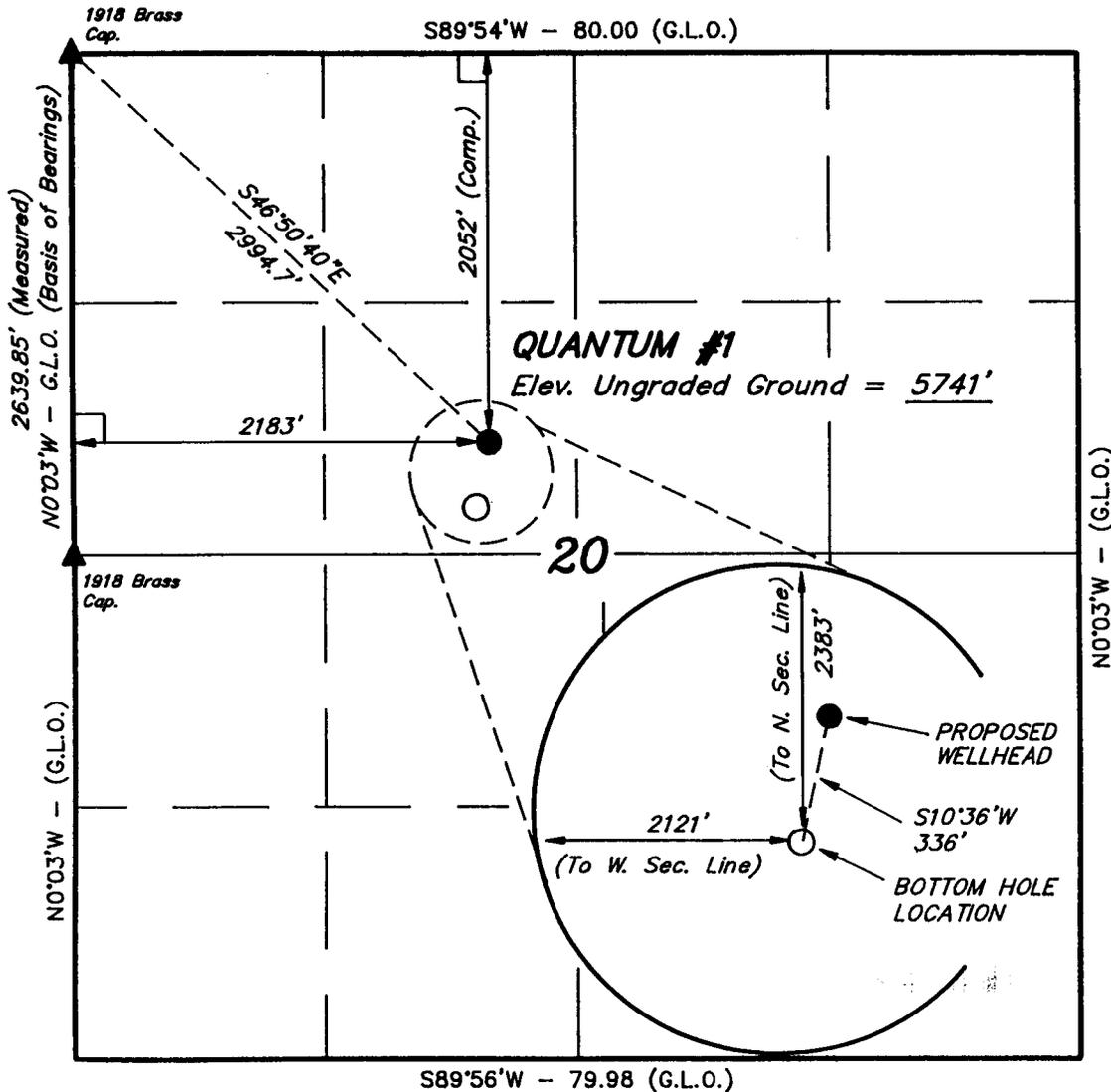
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

# T36S, R24E, S.L.B.&M.

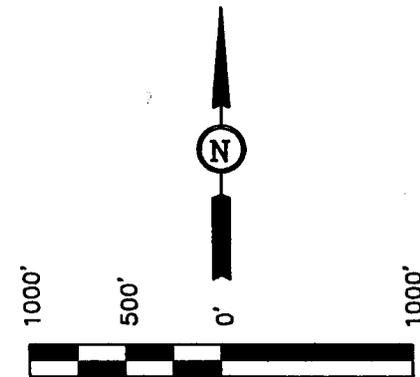
AMPOLEX (TEXAS) INC.

Well location QUANTUM #1, located as shown in the SE 1/4 NW 1/4 of Section 20, T36S, R24E, S.L.B.&M. San Juan County, Utah.



## BASIS OF ELEVATION

PEARSON TRIANGULATION STATION 1954 LOCATED IN THE SW 1/4 OF SECTION 18, T36S, R25E, S.L.B.&M. TAKEN FROM THE HORSEHEAD POINT QUADRANGLE, UTAH, SAN JUAN COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6383 FEET.



SCALE

CERTIFIED REGISTERED LAND SURVEYOR

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

ROBERT L. [Signature]  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 5708  
STATE OF UTAH

REVISED: 7-13-92 R.E.H.  
REVISED: 7-8-92 R.E.H.

## STATE PLANE COORDINATES:

PROPOSED WELL HEAD:  
X = 2,635,504 Y = 363,432

BOTTOM HOLE:  
X = 2,635,450 Y = 363,100

## LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

## UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 789-1017

SCALE	1" = 1000'	DATE SURVEYED:	DATE DRAWN:
PARTY	G.S. R.A. J.L.G.	6-4-92	6-18-92
WEATHER	HOT	REFERENCES	G.L.O. PLAT
		FILE	AMPOLEX (TEXAS) INC.

RECEIVED

JUL 17 1992

WATER RIGHTS SALT LAKE

TEMPORARY FILING FOR WATER IN THE STATE OF UTAH

RECEIVED

JUL 14 1992

Rec. by JDV Fee Rec. 25.00 Receipt # 217927

APPLICATION TO APPROPRIATE WATER

Microfilmed Roll #

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 to Title 73, Chapter 3 of the Utah Code Annotated (1953, as amended).

\*WATER RIGHT NO. 09 - 1801 \*APPLICATION NO. A T66339

1. \*PRIORITY OF RIGHT: July 14, 1992 \*FILING DATE: July 14, 1992

2. OWNER INFORMATION Name(s): Ampolex (Texas) Inc. c/o Billy Hass \*Interest: % Address: P.O. Box 1443 City: Moab State: Utah Zip Code: 84532 Is the land owned by the applicant? Yes No X (If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: cfs and/or 9.0 ac-ft.

4. SOURCE: Underground Water Wells \*DRAINAGE: which is tributary to which is tributary to

POINT(S) OF DIVERSION: COUNTY: San Juan 1) N. 2350 ft. & W. 444 ft. from SE Cor. Sec. 12, T38S, R24E, SLB&M. 2) S. 2722 ft. & E. 10 ft. from NW Cor. Sec. 1, T37S, R22E, SLB&M Description of Diverting Works: 1) Existing 8" diameter well, 506 feet deep 2) Existing 6" diameter well, 185 feet deep \*COMMON DESCRIPTION: 1) 7 miles North of Hatch Trading Post Hatch Trading Post Quad 2) 3 miles SE of Blanding Blanding South Quad

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

6. POINT(S) OF RETURN The amount of water consumed will be cfs or 9.0 ac-ft. The amount of water returned will be cfs or The water will be returned to the natural stream/source at a point(s):

RECEIVED JUL 27 1992

DIVISION OF OIL GAS & MINING

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

TEMPORARY

Appropriate

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

9. NATURE AND PERIOD OF USE

Irrigation:	From _____ to _____
Stockwatering:	From _____ to _____
Domestic:	From _____ to _____
Municipal:	From _____ to _____
Mining:	From _____ to _____
Power:	From _____ to _____
Other:	From <u>July 27, 1992</u> to <u>July 26, 1993</u>

10. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.  
 Stockwatering (number and kind): \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.  
 Domestic: \_\_\_\_\_  
 Municipal (name): \_\_\_\_\_  
 Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.  
 Ores mined: \_\_\_\_\_  
 Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_  
 Other (describe): Oil & gas exploration drilling, dust control, road construction and maintenance.

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s):  
 1) Quantum #1: S. 2052 ft. & E. 2183 ft. from NW Cor. Sec. 20, T36S, R24E, SLB&M (SE $\frac{1}{4}$ NW $\frac{1}{4}$ )  
 2) Scorpion #1: S. 187 ft. & E. 947 ft. from NW Cor. Sec. 34, T36S, R24E, SLB&M (NW $\frac{1}{4}$ NW $\frac{1}{4}$ )  
 3) Lower Squaw Point #1: N.624 ft. & E.684 ft. from SW Cor. Sec. 17, T37S, R26E, SLB&M (SW $\frac{1}{4}$ SW $\frac{1}{4}$ )

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of the same size if necessary):  
Exploration holes to be drilled by Ampolex (Texas) Inc. Water to be hauled by Aable Trucking to place of use. Points of diversion identified in paragraph #4 are evidenced by the following rights: #1 - 09-169 (Perkins Sheep Co.)  
#2 - 09-637 (Henry Clyde & Ivan R. Watkins)  
Verbal authorization given by Richard Perkins 7-14-92.

\*\*\*\*\*  
 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).

*Billy P. [Signature]*  
 Signature of Applicant(s)\*

\*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its authorized agent, or in the name of the partnership by one of the partners.

\_\_\_\_\_  
 Authorized Agent (please print)

\_\_\_\_\_  
 Authorized Agent (signature)

STATE ENGINEER'S ENDORSEMENT

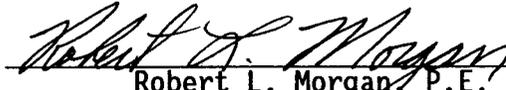
WATER RIGHT NUMBER: 09 - 1801

APPLICATION NO. T66339

1. July 14, 1992            Application received by MP.
  2. July 15, 1992            Application designated for APPROVAL by MP and KLJ.
  3. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 23, 1992, subject to prior rights and this application will expire on July 23, 1993.

  
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, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)
- 
3. APPROXIMATE DATE PROJECT WILL START:  
As soon as approved
- 
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Southeastern Utah Association of Governments
- 
5. TYPE OF ACTION:  Lease  Permit  License  Land Acquisition  
 Land Sale  Land Exchange  Other \_\_\_\_\_
- 
6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill
- 
7. Ampolex (Texas), Inc. proposes to drill the Quantum #1 well (wildcat) on federal lease U-62681, 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 action and must issue approval before operations commence.
- 
8. LAND AFFECTED (site location map required) (indicate county)  
SE/4 NW/4, Section 20, Township 36 South, Range 24 East, San Juan County, Utah
- 
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
- 
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
See Attachment
- 
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
- 
12. FOR FURTHER INFORMATION, CONTACT: Frank R. Matthews  
PHONE: 538-5340
13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:   
DATE: 7/29/92  
Petroleum Engineer

**BUREAU OF LAND MANAGEMENT  
MOAB DISTRICT  
CONDITIONS OF APPROVAL FOR PERMIT TO DRILL**

Company: **Ampolex (Texas), Inc.** Well No: **Quantum #1**  
 Location: **Sec: 20 T. 36S R. 24E Lease No. U-62681**  
 Onsite Inspection Date: **July 09, 1992.**

All lease and/or unit 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. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

**A. DRILLING PROGRAM:**

**1. Surface Formation and Estimated Formation Tops:**

<u>FORMATION</u>	<u>TVD, KB</u>	<u>SUBSEA</u>	<u>TRUE VERTICAL THICKNESS</u>
Morrison	Surface		
Entrada SS	530'	+5,200'	165'
Carmel	695'	+5,035'	45'
Navajo SS/Kayenta & Wingate SS	740'	+4,990'	890'
Chinle	1,630'	+4,100'	650'
Shinarump Congl	2,280'	+3,450'	105'
Cutler (may include Moenkopi)	2,385'	+3,345'	2,030'
Upper Hermosa	4,415'	+1,315'	1,130'
Upper Ismay	5,545'	+ 185'	100'
Hovenweep Sh.	5,645'	+ 85'	50'
Lower Ismay	5,695'	+ 35'	10'
Anhdrite	5,705'	+ 25'	20'
Carbonate	5,725'	+ 5'	10'
Gothic Shale	5,735'	- 5'	25'
Upper Desert Creek	5,760'	- 30'	15'
Anhydrite	5,775'	- 45'	35'
Carbonate	5,810'	- 80'	20'
Lower Desert Creek	5,830'	- 100'	10'
Anhydrite	5,840'	- 110'	15'
Pay Zone	5,855'	- 125'	30'
Base Pay	5,885'	- 155'	10'
Chimney Rock Sh.	5,895'	- 165'	25'
Akah	5,920'	- 190'	30'
Total Depth	5,950'	- 220'	--

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

2. Estimated Depth at which Oil, Gas, Water or other Mineral-Bearing Zones are expected to be encountered:

	<u>Formation</u>	<u>Depth</u>
Expected Oil & Gas Zones:	Upper Ismay	5,545'
	Lower Ismay	5,695'
	Lower Desert Creek	5,855'

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.

3. Pressure Control Equipment:

(A). After initial WOC time, a 8-5/8", 3,000# casing head will be installed. Minimum requirement for BOP equipment will consist of a 10", 3,000# double ram preventer with blind and pipe rams and one 10", 3,000# annular BOP.

(B). BOP rams and accessories including upper kellycock, floor safety valve and choke manifold will be pressure tested as per BLM approved NTL-6. Enter BOP tests in the Daily Tour Book. The pipe rams will be operationally checked each 24 hours. Blind rams will be operationally checked each time pipe is pulled out of the hole, but not more than once a day. Studs on all wellhead and BOP flanges should be checked for tightness each week. Hand wheels for locking screws shall be installed and operational and the entire BOP and wellhead assembly shall be kept clean of mud. A drill stem safety valve in the open position shall be available on the rig floor at all times.

(C). BOP equipment will be pressure tested again prior to drilling into the Lower Desert Creek Formation.

(D). Uncased hole is NOT to be pressured during BOP tests!

(E). Keep hole full at all times during tripping operations. If pipe or tools are to be left stationary at any time in open hole, the kelly is to be picked up, the pipe rotated and circulation maintained.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

4. Casing Program and Auxiliary Equipment:

Surface Pipe: 9-5/8", 36#, K-55, LT&C to be set in 12-1/4" hole at 1,700' (minimum of 50' into the Chinle). Guide shoe and insert float collar with fill up to be run on bottom joint with one (1) centralizer in the middle. Additional centralizers to be spaced out every fourth joint.

Cement: Hole volume plus 100% excess of Light Cement lead slurry with 2% CCL and 1/4 lb./sk Flocele and tail in with 250 sx Class "G" with 2% CCL and 1/4 lb./sk Flocele.

Production Casing:

5-1/2", 17#, K-55 set at TD in 7-7/8" hole. Guide shoe and differential fill float collar to be run on first joint. Centralizers and scratchers to be run across all potential zones of production.

Cement: Use sufficient volume of cement to bring TOC above all possible pay zones. Cementing program to be determined after logging.

Anticipated cement tops will be reported as to depth, not the expected number of sacks.

5. Mud Program and Circulating Medium:

Surface Hole: Drill with fresh water using gel and lime for

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

viscosity and mica to control seepage.

**Main Hole:** Drill out from surface pipe using fresh water, lime and flocculants. At  $\pm$  4,400', clean out mud tanks and "mud-up" with a gel mud 8.8 - 9.0 ppg, 30-35 sec/qt vis. and 10-15 cc water loss. Maintain mud properties for DST at all times. At  $\pm$  5,810' raise mud wt. to 11.0 ppg by adding barite before drilling into the Lower Desert Creek Fm. and maintain weight to TD. A detailed mud program will be furnished by the mud supplier. All recommendations made by the mud engineer must be followed.

Operations will be conducted in accordance with ONSHORE OIL AND GAS ORDER NO. 2; DRILLING OPERATIONS, except where advance approval for a variance has been obtained.

6. Coring, Logging, and Testing Program:

**Core:** One (1)-60' in the Lower Desert Creek

**Drill Stem Tests:** One (1) probable - Lower Desert Creek  
One (1) possible - Upper & Lower Ismay

A test of the top of the porosity will be conducted under the following circumstances:

1. Top of porosity should be indicated by a drilling break. Drill 10' into the break or until a definite decrease in drill rate is observed, whichever is the lesser.
2. Circulate for samples and gas shows. If cuttings show good visual porosity and are accompanied by significant increases in gas

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

notify Ampolex personnel of same and prepare to DST.

Open Hole Logs:            Dual Laterolog - TD to 4,300'.

Density-Neutron - TD to 4,300'.

Long Space Digital Sonic - TD to base of surface casing.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4 will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1(b). Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

NOTE:            **ABNORMAL PRESSURE IS EXPECTED TO BE  
                         ENCOUNTERED IN THE LOWER DESERT  
                         CREEK - 3,300 -3,400 psi.**

8. Anticipated Starting Dates and Notifications of Operations:

Required verbal notifications are summarized in Table I, 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.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with Minerals Management Service.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

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.

A first production conference may 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 thirty (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(d) and Onshore Oil and Gas Order NO. 2.

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

Well name and number, location by 1/4 1/4 Section, Township and Range, Lease Number and Operator.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

**B. THIRTEEN-POINT SURFACE USE PLAN:**

**1. Existing Roads:**

- a. Location of proposed well in relation to town or other reference point: See Topo Map "A".
- b. Proposed route to location: See Topo Map "A" and Topo Map "B".
- c. Plans for improvement and/or maintenance of existing roads: Existing roads will need no improvement but will be maintained reasonably smooth and free of ruts, soft spots, chuckholes, rocks and slides, and washboards.
- d. An encroachment permit will be obtained from the San Juan County Road Department (801)587-2231, Ext. 43 for use of county roads.

**2. Planned Access Roads:**

Approximately 20 feet of new road, 40 feet of maximum disturbed width would be constructed.

The access (including any existing non-county) road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of completion of drilling operations.

Ditched, crowned, culverts in place where required, and surfaced with rock. No cattleguards will be needed.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance of usage.

The topsoil from the access road will be reserved in place.

A Right-of-Way for the portion of road highlighted in pink on Topo Map "B" and approximately 3.1 miles in length will be needed. Application for said Right-of-Way is hereby made.

3. Location of Existing Wells: None in a 1-mile radius.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

4. All permanent above-ground facilities (in place six months or longer) will be painted a neutral, juniper green color as required by the Authorized Officer, except for those facilities or portions thereof required to comply with the Occupational Safety and Health Act or written company safety manual or documents. The paint on the surfaces of the facilities will be maintained as required by the Authorized Officer.

If a tank battery is constructed on this location it will be surrounded by a dike of sufficient capacity to contain 1.5 times the storage capacity of the largest tank + one days production entering the battery. All load lines and valves will be placed inside the dike surrounding the tank battery. The tank battery and berm, any pits, and any production facilities shall be fenced and the fence will be maintained. The gates shall be kept closed.

All site security guidelines identified in 43 CFR 3162.7-5 and ONSHORE OIL AND GAS ORDER NO. 3; SITE SECURITY will be adhered to.

Gas measurement will be conducted in accordance with the ONSHORE OIL AND GAS ORDER NO. 5; GAS MEASUREMENT and 43 CFR 3162.7-3.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the well head to the meter and downstream for the remainder of the pad. Meter runs will be housed and/or fenced.

Oil measurement will be conducted in accordance with ONSHORE OIL AND GAS ORDER NO. 4; OIL MEASUREMENT and 43 CFR 3162.7-2.

5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from four (4) privately owned sources. They are as follows:

- (1) Water well owned by Clyde Watkins, located South 2722' and East 10' from the NW corner, Sec. 1, T37S, R22E, S.L.B. & M.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

- (2) Water well owned by Grady Ragsdale, located in the NE1/4 NE1/4, Sec. 23, T40N, R19W, Delores County, Colorado.
- (3) Water Well owned by Richard Perkins, located North 2350' and West 444' from the SE corner, Sec. 12, T38S, R24E, S.L.B. & M.
- (4) Town of Dove Creek, Colorado.

Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of that water.

6. Source of Construction Material:

Pad construction material will be obtained from on site and in place materials.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.

7. Methods of Handling Waste Disposal:

The reserve pit will be constructed with at least 1/2 of the capacity in cut material and will be lined with 24 tons of bentonite. The sides of the pit shall be sloped no greater than three to one. If bentonite is used as lining material it shall be worked into the soil.

The 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 four (4) strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four (4) feet. The fence will be kept in good repair while the pit is drying.

No liquid hydrocarbons (i.e. fuels, lubricants, formation) will be discharged to the reserve pit, location, or on the access road. In the event of an accident and hydrocarbons are allowed to escape, all hydrocarbons will be cleaned up and removed within 48 hours.

No chrome compounds will be on location.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

Produced waste water will be confined to the reserve pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to NTL-2B.

**Other:**

Portable Chemical Toilet will be provided.

Garbage and trash will be disposed of in trash bin. The trash bin will be totally enclosed with small mesh wire to prevent wind scattering trash before being removed. Reserve pit will be fenced on three sides during drilling and the fourth side fenced upon removal of the rig.

After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. All open pits will be fenced during drilling and kept closed until the pit is leveled.

**8. Ancillary Facilities:**

Camp facilities will not be required.

**9. Well Site Layout:**

The reserve pit will be located: See attached layout sheet.

**10. Plans for Restoration of Surface:**

A. Within 24 hours of completion of drilling, the location and surrounding area will be cleared of everything not required for production.

B. As soon as the reserve pit has dried all areas not needed for production (including the access road) will be filled in, contoured to approximately natural contours and as much top soil as was removed replaced, leaving sufficient for future restoration. This area will then be seeded. The remaining top soil will be stabilized and seeded in place. If the well is a dry hole, the location and access road will be rehabilitated in total.

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

C. The area will be seeded between October 1 and February 28 with:

4 lbs/acre - Crested Wheatgrass  
4 lbs/acre - Fourwing Saltbrush  
2 lbs/acre - Desert Bitterbrush  
1 lbs/acre - Yellow Sweetclover  
1 lbs/acre - Wild Sunflower  
4 lbs/acre - Alfalfa

The pounds of seed listed above is pure live seed.

D. Seed will be broadcast followed by a light harrowing. If the seed is drilled, the seeding rate can be reduced by 25% and harrowing can be eliminated.

11. Surface and Mineral Ownership: B.L.M.

12. Other Information: Same on new construction as old.

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.

"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 31262.6.

The dirt contractor will be provided with an approved copy of the surface use plan.

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:

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

- 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.

This permit will be valid for one (1) year from the date of approval. After permit termination; a new application will be filed for approval for any future operations.

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.

13. Lessee's or Operator's Representative and Certification:

Representative:

Name: Robert C. Arceneaux  
Address: 1225 17th Street, Suite #3000  
Denver, Colorado 80202  
Telephone No.: (303) 297-1000

Ampolex (Texas), Inc.  
Quantum #1  
Sec. 20, T36S, R24E  
Lease #U-62681

Certification:

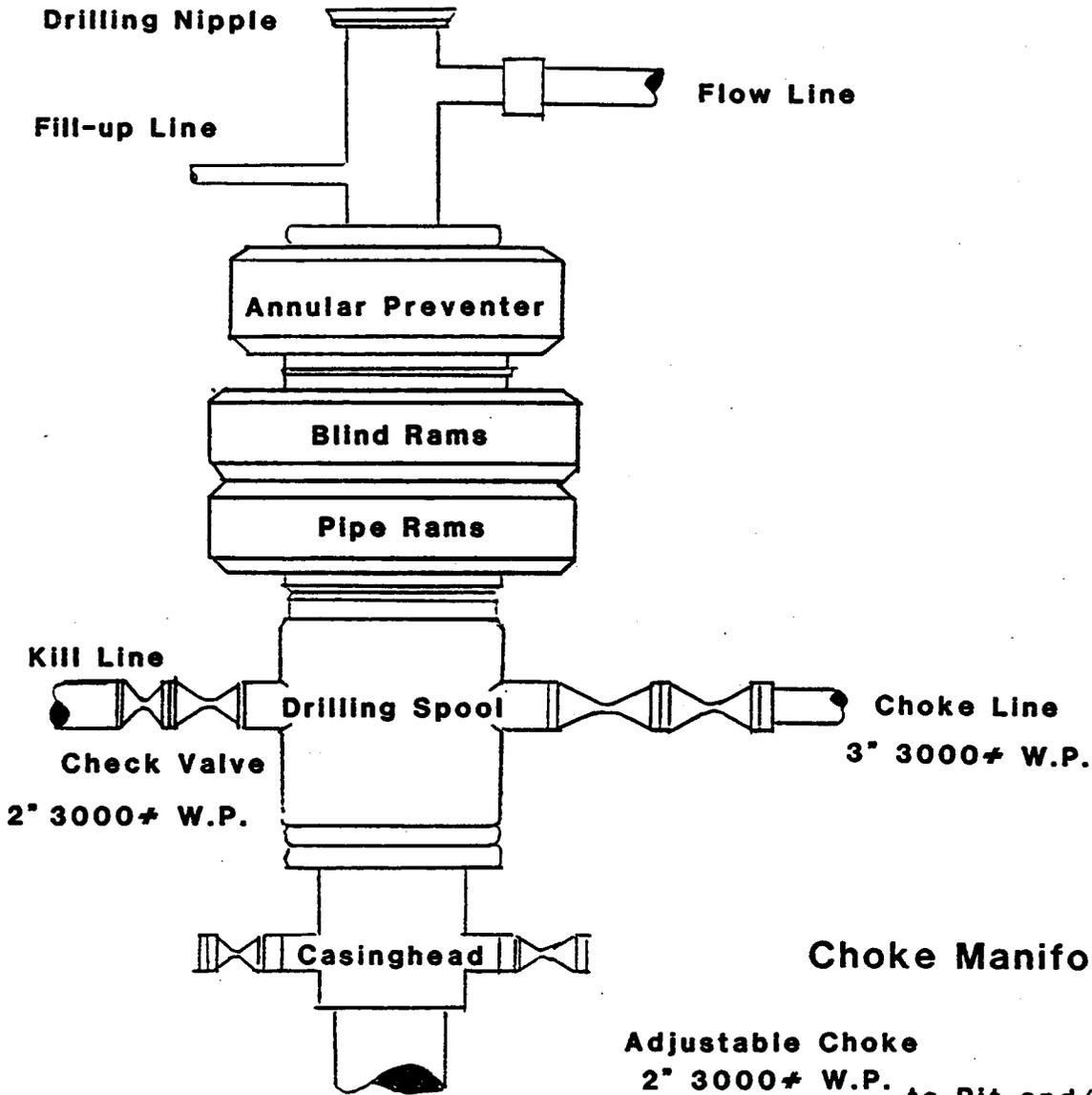
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which currently exist, that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with operation 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. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

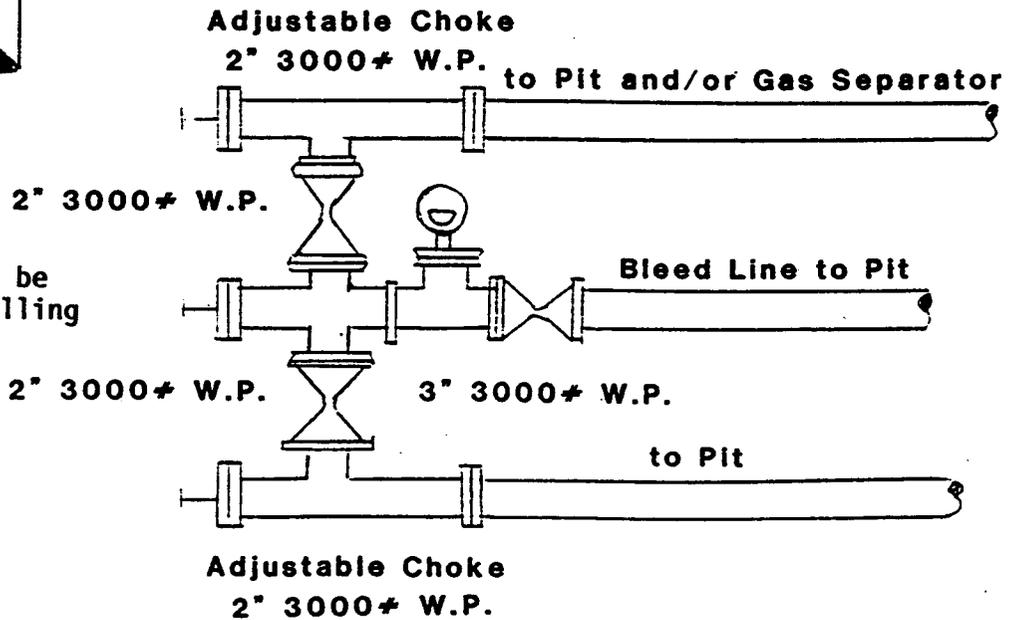
Name: *Robert C. Arceneaux*  
Title: Robert C. Arceneaux  
Senior Petroleum Engineer  
Date: July 23, 1992

# EXHIBIT C Blow Out Preventer Equipment

## BOP Stack



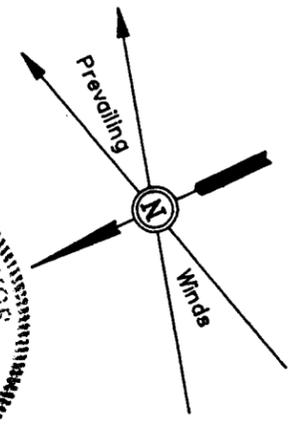
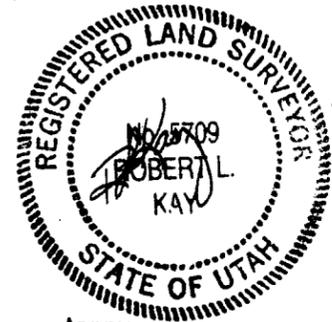
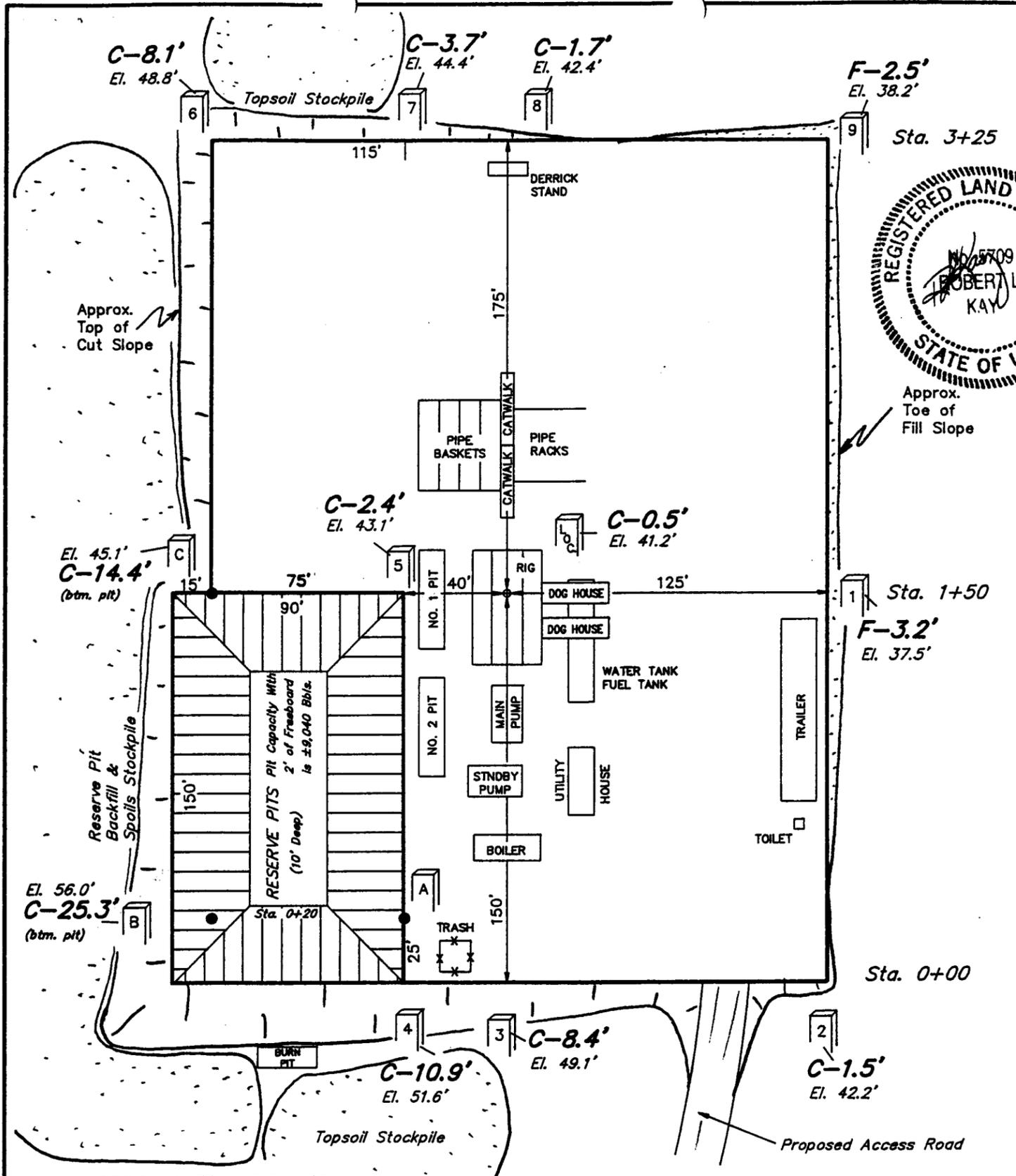
## Choke Manifold



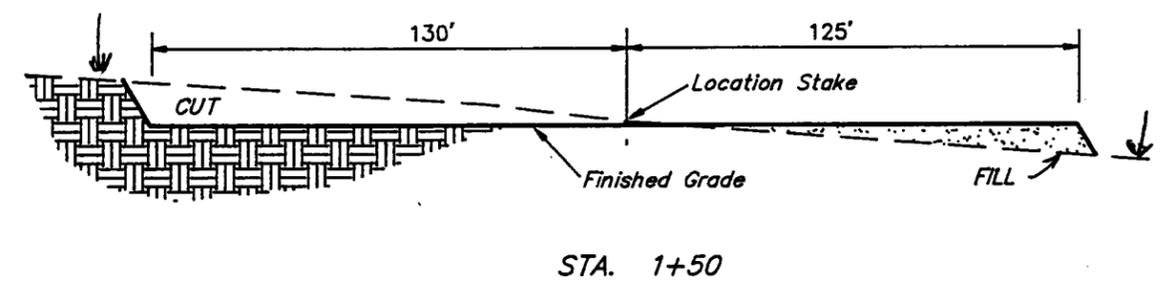
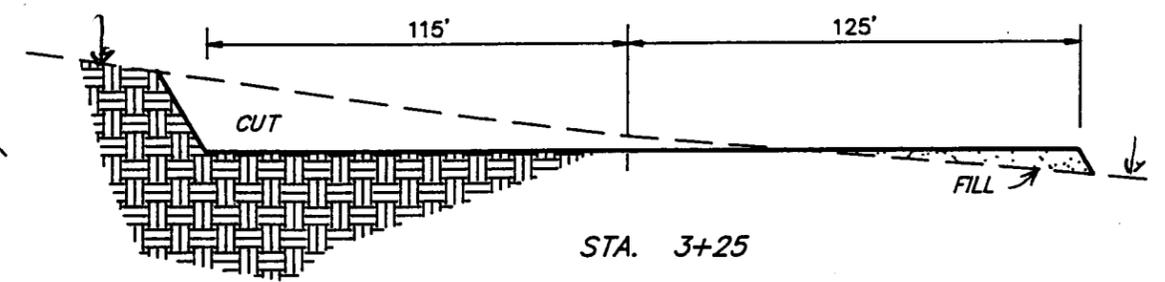
**NOTE:** BOP side outlets may be used in place of drilling spool.

AMPOLEX (TEXAS) INC.

LOCATION LAYOUT FOR  
QUANTUM #1  
SECTION 20, T36S, R24E, S.L.B.&M.

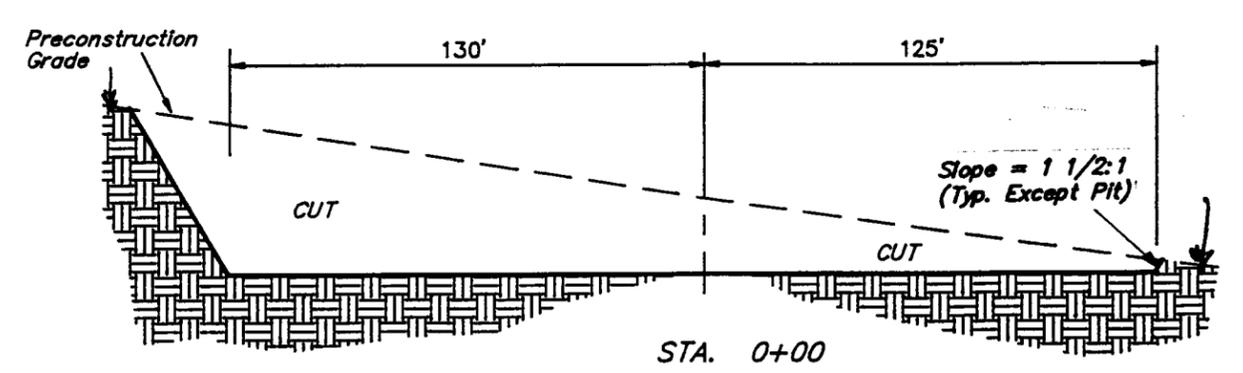
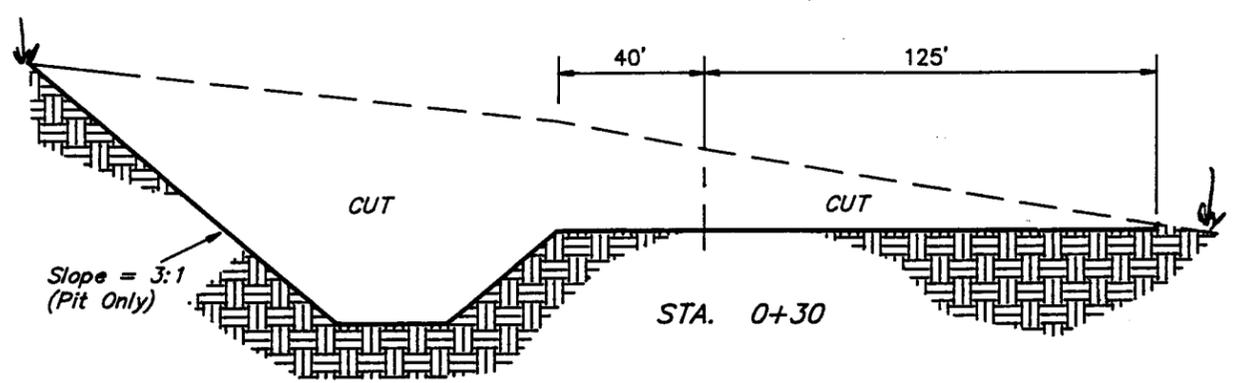


SCALE: 1" = 50'  
DATE: 6-18-92  
Drawn By: R.E.H.  
REVISED: 7-12-92 R.E.H.



X-Section Scale  
1" = 20'  
1" = 50'

TYP. LOCATION LAYOUT  
TYP. CROSS SECTIONS



NOTES:

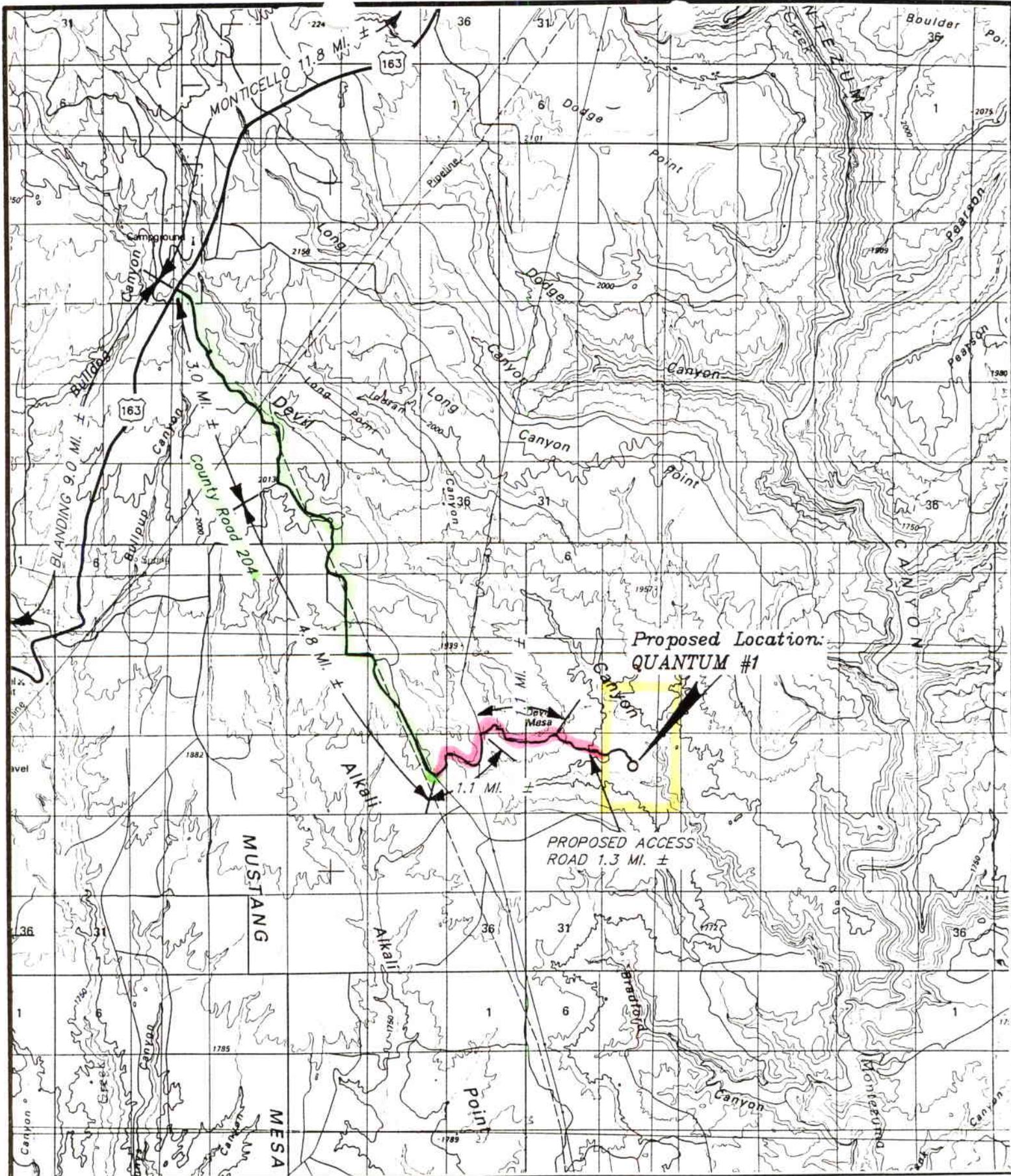
Elev. Ungraded Ground At Loc. Stake = **5741.2'**  
FINISHED GRADE ELEV. AT LOC. STAKE = **5740.7'**

UINTAH ENGINEERING & LAND SURVEYING  
85 South 200 East Ferris, Utah

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,490 Cu. Yds.
Remaining Location	= 16,720 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 18,210 CU.YDS.</b>
<b>FILL</b>	<b>= 1,220 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 16,930 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,880 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 14,050 Cu. Yds.



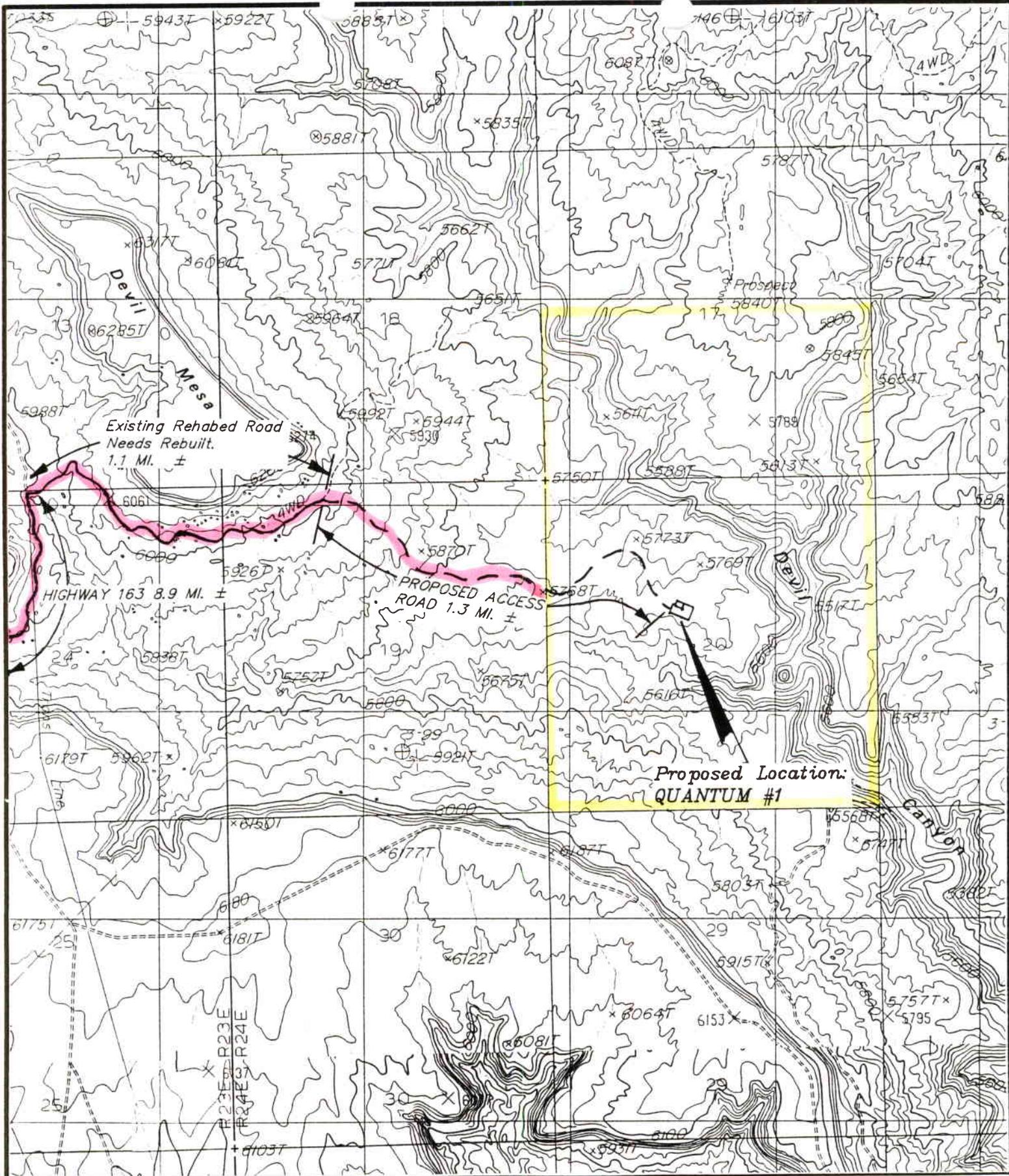
TOPOGRAPHIC  
MAP "A"

REVISED: 7-12-92 J.L.G.  
DATE 6-16-92 R.E.H.



AMPOLEX (TEXAS) INC.

QUANTUM #1  
SECTION 20, T36S, R24E, S.L.B.&M.



TOPOGRAPHIC  
MAP "B"

REVISED: 7-12-92 J.L.G.  
DATE 6-16-92 R.E.H.



**BLM Right of Way Needed**  
**AMPOLEX (TEXAS) INC.**

QUANTUM #1  
SECTION 20, T36S, R24E, S.L.B.&M.

**AMPOLEX LEASE LINE**

APD WORKSHEET  
Division of Oil, Gas and Mining

OPERATOR: AMPOLEX (TEXAS) INC  
WELL NAME: QUANTUM 1

J-0385

APD RECEIVED: 07/27/92

API ASSIGNED: 43-037-31688

LEASE TYPE: FED LEASE NUMBER: J-60681  
LOCATION: SENW 20 - T36S - R24E SAN JUAN COUNTY  
FIELD: WILDCAT CODE: 001

RECEIVED AND/OR REVIEWED:

- Plat
- Bond  
(Number 1)
- Potash (Y/N)
- Oil shale (Y/N)
- Water permit  
(Number 09-1801 Title 339)
- Sent to RDCC (Y/N)  
(Date: 7-29-90)

SPACING:

- R649-2-3. Unit: Quantum
- R649-3-2. 40 acre spacing.
- R649-3-3. Exception.
- Board Order.  
Cause number: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS: No other producing well within the unit.  
Obligation for Quantum Unit.

STIPULATIONS: \_\_\_\_\_

CONFIDENTIAL  
PERIOD  
EXPIRED  
ON 11-27-93



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE RESOURCES

Norman H. Bangertter  
Governor  
Dee C. Hansen  
Executive Director  
Timothy H. Provan  
Division Director

Southeastern Region  
455 West Railroad Avenue  
Price, Utah 84501-2829  
801-637-3310

August 3, 1992

Mr. Ed Scherick  
Bureau of Land Management  
San Juan Resource Area  
P.O. Box 7  
Monticello, Utah 84535

Dear Ed:

We appreciate your response to our request for information on a number of APDs within your Resource Area. We have reviewed the proposed actions for the Quantum #1 well (EA# 069-92-044), the Scorpion #1 well (EA# 069-92-045), and the Cactus Park #1 well (EA# 069-92-046). We have the following comments regarding these proposed wells.

We have commented in two previous letters (July 23, 1992 and July 29, 1992) on impacts to wildlife associated with energy exploration activities in the Montezuma Creek drainage. These three wells will have similar impacts as those we outlined in the above mentioned letters. We recommend that the guidelines and measures that we outlined in the earlier responses be applied to the three newly proposed well sites.

Once again, we emphasize the need for measures which mitigate the cumulative impacts of the intensive activity that is currently taking place in this area of critical wildlife habitat. Preservation of the unique wildlife values found in the Montezuma Creek vicinity will enhance the worth of these public lands.

We appreciate the cooperation and information received concerning proposed actions in your Resource Area. If you have any questions regarding our comments on these or any other actions, please contact Ken Phippen, Regional Habitat Manager.

Sincerely,

Miles Moretti  
Regional Supervisor

SR/lcl

Copy: Ralph Miles, DWR  
Roger Zortman, BLM

FYI

② - FRM

④ - TAs

③ - LWP

RDCC Agenda  
August 11, 1992  
2

DTB(8-10-92)

5. UT910503-060

USDA/Forest Service: Fishlake National Forest - Deep Creek and Snow Bench Timber Sale - Final Environmental Impact Statement. This is not the complete document; if additional information is needed, please contact OPB. Comments due 8-25-92.

6. UT920731-120

*Copy Lowell*

DOI/BLM/Office of Surface Mining Reclamation & Enforcement/Iron & Kane Counties: Intent to Prepare an EIS on the Proposed Warm Springs Project (Andalex), Including the Proposed Smoky Hollow Underground Coal Mine and its facilities. Comments due 9-7-92.

7. UT920803-040

USDA/Forest Service: Uinta National Forest - Visitor Facilities Water Project, Cascade Springs. Comments due 8-24-92.

8. UT920803-050

USDA/Forest Service: Ashley National Forest - Bear Wallow Area - Environmental analysis. Comments due 8-14-92.

9. UT920803-060

USDA/Forest Service: Land Exchange Robert Redford and U.S. Forest Service Diamond Fork - Provo Canyon Areas. Comments due 8-24-92

**III. SHORT TURNAROUND**

**\*Please Note! Due to the short turnaround please comment directly to the Agency with a copy to OPB.**

10. UT920803-010

*Airpoller*

Division of Oil, Gas & Mining/San Juan County: Application for Permit to Drill - Proposal to drill a wildcat well, the Quantum No. 1 well, on federal lease U-62681 (Sec. 20, T36S, R24E). Comments due 8-18-92.

43-037-31188

OVER

11. UT920803-020

*Ampo/ex*

Division of Oil, Gas & Mining/San Juan County: Application for Permit to Drill - Proposal to drill a wildcat well, the Scorpion No. 1 well, on federal lease U-68673 (Sec. 34, T36S, R24E). Comments due 8-18-92.

12. UT920803-030

*Ampo/ex*

Division of Oil, Gas & Mining/San Juan County: Application for Permit to Drill - Proposal to drill a wildcat well, the Cactus Park No. 1 well, on federal lease U-68672 (Sec. 24, T36S, R24E). Comments due 8-18-92.

13. UT920803-070

*Ampo/ex*

Division of Oil, Gas & Mining/San Juan County: Application for Permit to Drill - Proposal to drill a wildcat well, Lower Squaw Point No. 1 well, on federal lease U-57609 (Sec. 17, T37S, R26E). Comments due 8-18-92.

IV. STREAM ALTERATIONS

**\*Please Note! Due to the short turnaround please comment directly to the Agency with a copy to OPB.**

14. UT920727-060

*Copy cover letter for Hydro for FRI*

Division of Water Rights/Emery County: Huntington Creek (No. 92-93-06SA) - Permit application to alter a natural stream channel (Sec. 15, T17S, R8E). Comments due 8-17-92.

15. UT920727-050

Division of Water Rights/Kane County: Stout Creek (No. 92-81-04SA) - Permit application to alter a natural stream channel. (Sec. 36, T39S, R7W). Comments due 8-17-92.

16. UT920727-040

Division of Water Rights/Emery County: Huntington Creek (No. 92-93-07SA) - Permit application to alter a natural stream channel (Sec. 9, T17S, R8E). Comments due 8-17-92.

*OVER*



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

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

September 11, 1992

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

Gentlemen:

Re: Quantum 1 Well, 2052 feet from the north line, 2183 feet from the west line, SE 1/4 NW 1/4, Section 20, Township 36 South, Range 24 East, San Juan County, Utah

Pursuant to Utah Code Ann. § 40-6-18, (1953, as amended), Utah Admin. R. 649-2-3, Application of Rules to Unit Agreements and R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

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

1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
2. Notification within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068.

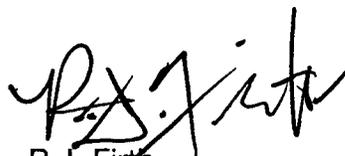
Page 2  
Ampolex (Texas), Inc,  
Quantum 1 Well  
September 11, 1992

6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-037-31688.

Sincerely,



R.J. Firth  
Associate Director, Oil and Gas

ldc  
Enclosures  
cc: Bureau of Land Management  
J.L. Thompson  
WO11



State of Utah  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF WILDLIFE RESOURCES

any APD  
 route to F. Matthe

RECEIVED

SEP 11 1992

DIVISION OF  
 OIL GAS & MINING

Norman H. Bangertter  
 Governor  
 Dee C. Hansen  
 Executive Director  
 Timothy H. Provan  
 Division Director

1596 West North Temple  
 Salt Lake City, Utah 84116-3195  
 801-538-4700  
 801-538-4441 (Fax)

August 12, 1992

Dr. Dianne Nielson  
 Division of Oil, Gas and Mining  
 355 West North Temple  
 3 Triad Center, Suite 350  
 Salt Lake City, Utah 84180

Employed  
 Sec 10, T 36S, R 24E  
 San Juan  
 43-013-31688

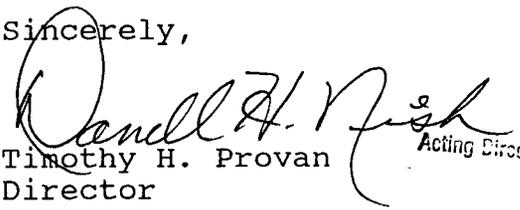
Dear Dianne:

We are writing in response to four applications for permits to drill (APDs) in the Montezuma Creek area of San Juan County. These wells include the Quantum No. 1 well (U-62681), the Scorpion No. 1 well (U-68673), the Cactus Park No. 1 well (U-68672), and the Lower Squaw Point No. 1 well (U-57609). We have the following comments regarding these applications.

As part of the NEPA process initiated by the Bureau of Land Management (BLM), the Division of Wildlife Resources has reviewed these proposed wildcat wells for potential impacts on wildlife populations and habitat. Enclosed are three letters to the BLM which outline the potential impacts of oil and gas exploratory activities in this area, as well as recommended measures to help mitigate these impacts. We are particularly concerned with the significant increase of exploratory activity in the Montezuma Creek drainage and the accompanying cumulative impacts. The Montezuma Creek area provides critical habitat for a number of species, including several threatened and endangered species. Should these APD's be approved, we strongly recommend the survey and monitoring measures outlined in the enclosed letters be included as stipulations (due to the lack of information on the status and distribution of these species).

We appreciate the opportunity to provide input on these proposed actions. If you have any questions regarding our comments, please contact Ken Phippen, Regional Habitat Manager (637-3310).

Sincerely,

  
 Timothy H. Provan  
 Director  
 Acting Director

Enclosures



# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENT

WILLIAM D. HOWELL  
Executive Director

P. O. Drawer 1106 • Price, Utah 84501 • Telephone 637-5444

## AREAWIDE CLEARINGHOUSE A-95 REVIEW

14 01 07

NOI \_\_\_ Preapp \_\_\_ App \_\_\_ State Plan \_\_\_ State Action X Subdivision \_\_\_ (ASP # 8-83-5, 6, 7, 8)

Other (indicate) \_\_\_\_\_ SAI Number UT920803-010, 020, 030  
070

**Applicant (Address, Phone Number):**

Oil, Gas and Mining  
355 West North Temple  
3 Triad Center Ste 350  
Salt Lake City, UT 84180-1203

**Federal Funds:**

**Requested:** \_\_\_\_\_

**Title:**

APPLICATION FOR PERMIT TO DRILL

RECEIVED

SEP 02 1992

DIVISION OF  
OIL GAS & MINING

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

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

**Comments:**

Marjorie Ann Wegman  
Authorizing Official

8-31-92

Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

Form approved  
Budget Bureau No. 1004-013  
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

2. TYPE OF WELL  
 OIL WELL       GAS WELL       OTHER       SINGLE ZONE       MULTIPLE ZONE

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

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

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface: 2052' FNL 2183' FWL  
 At proposed prod. zone: 2383' FNL 2121' FWL

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 See Topo Map "A"

7. LEASE ORIGINATOR AND SERIAL NO.  
 U-62681

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

9. UNIT AGREEMENT NAME  
 Quantum

10. FARM OR LEASE NAME  
 Quantum

11. WELL NO.  
 1

12. FIELD AND POOL, OR WILDCAT  
 Wildcat

13. SEC., T., R., M., OR B.E. AND SURVEY OR AREA  
 Sec. 20, T36S, R24E

14. COUNTY OR PARISH | 15. STATE  
 San Juan | Utah

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 2121' (Btm. Hole)

17. NO. OF ACRES IN LEASE  
 960

18. NO. OF ACRES ASSIGNED TO THIS WELL  
 320

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

20. PROPOSED DEPTH  
 5950'

21. ROTARY OR CABLE TOOLS  
 Rotary

22. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5741' GR.

23. APPROX. DATE WORK WILL START\*  
 A.S.A.P.

43-037-31688

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36 K-55	1700'	To Surface
8 3/4"	5 1/2"	17 K-55	T.D.	T.O.C. above all pay zones

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

Bond coverage for this well is provided by Nationwide Surety #69HF3973.

RECEIVED

SEP 10 1992

DIVISION OF  
OIL GAS & MINING

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

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

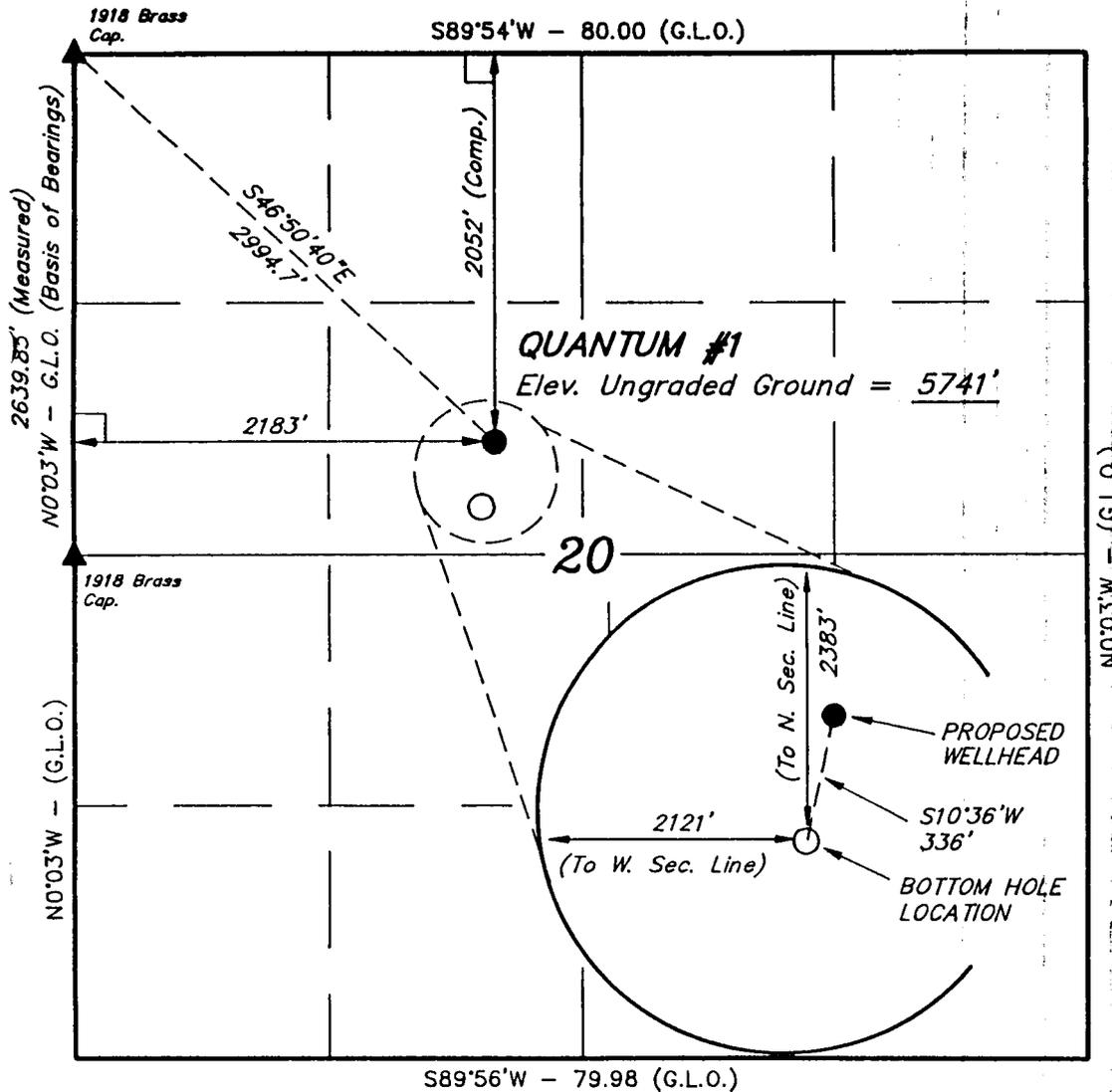
24. SIGNED Robert C. Greenaway TITLE Senior Petroleum Engineer DATE 07/23/92

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY /S/ WILLIAM C. STRINGER TITLE Assistant District Manager DATE SEP 4 1992  
 CONDITIONS OF APPROVAL, IF ANY: for Minerals ATTACHED

CONDITIONS

# T36S, R24E, S.L.B.&M.



**QUANTUM #1**  
Elev. Ungraded Ground = 5741'

### STATE PLANE COORDINATES:

PROPOSED WELL HEAD:  
X = 2,635,504 Y = 363,432

BOTTOM HOLE:  
X = 2,635,450 Y = 363,100

### LEGEND:

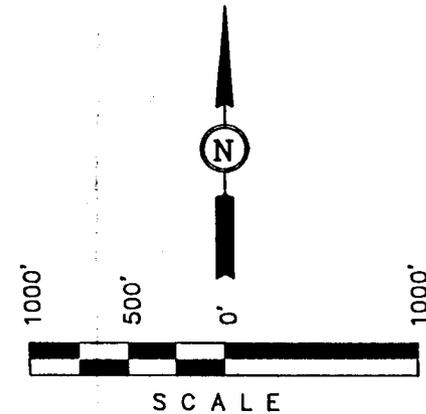
- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

## AMPOLEX (TEXAS) INC.

Well location QUANTUM #1, located as shown in the SE 1/4 NW 1/4 of Section 20, T36S, R24E, S.L.B.&M. San Juan County, Utah.

### BASIS OF ELEVATION

PEARSON TRIANGULATION STATION 1954 LOCATED IN THE SW 1/4 OF SECTION 18, T36S, R25E, S.L.B.&M. TAKEN FROM THE HORSEHEAD POINT QUADRANGLE, UTAH, SAN JUAN COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6383 FEET.



### CERTIFICATE

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

*Robert L. Gray*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 5799  
STATE OF UTAH

REVISED: 7-13-92 R.E.H.  
REVISED: 7-8-92 R.E.H.

### UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 788-1017

SCALE	1" = 1000'	DATE SURVEYED:	6-4-92	DATE DRAWN:	6-18-92
PARTY	G.S. R.A. J.L.G.	REFERENCES	G.L.O. PLAT		
WEATHER	HOT	FILE	AMPOLEX (TEXAS) INC.		

Ampolex (Texas), Inc.  
Well No. Quantum 1  
SENW Sec. 20, T.36S., R.24E.  
San Juan County, Utah  
Lease U-62681  
Quantum Unit

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 CO 0701 (Principal - Ampolex (Texas), Inc.) via surety consent as provided for in 43 CFR 3104.2.

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

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, 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 field representatives to insure compliance.

A. DRILLING PROGRAM

1. Daily drilling and completion progress reports shall be submitted to the District office on a weekly basis.

2. The 3000 psi (3M) BOP system will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. 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. Annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded on the daily drilling report.

3. A directional survey shall be run to determine the exact bottom hole location. A copy of this survey shall be submitted to the BLM with the completion report.

4. Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

5. Cement volumes were not included in the APD. The volume of cement to be used in setting the production casing shall be submitted to the BLM prior to running pipe. We must verify that the volume of cement is adequate to isolate all fluid bearing zones penetrated.

B. SURFACE USE PLAN

1. The location will be rehabilitated as per the conditions of approval in the APD.
2. If construction is delayed until February 1, 1993, the wildlife biologist will be notified and a survey would be done to ensure raptor safety during the critical nesting season. All raptor nests will be avoided by one-half mile from construction activities.

### C. REQUIRED NOTIFICATIONS AND APPROVALS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the Resource Area, Natural Resource Protection Specialist at least 24 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. 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, regardless of whether spud was made with a dry hole digger or big rig.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- A first production conference will be scheduled as soon as production testing begins and hydrocarbons reach the surface. This conference should be coordinated through the Resource Area Office.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Assistant District Manager for off-lease measurement, off-lease storage of commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the BLM, Moab District Office prior to initiating plugging operations. Table 1 of this document provides the after-hours phone numbers of personnel who are authorized to give plugging instructions.

NOTIFICATIONS

Notify Jeff Brown or Robert Larsen 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;

50 feet prior to reaching surface casing setting depth;

3 hours prior to testing BOPE;

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, notify one of the people listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Dale Manchester, Petroleum Engineer	Office: (801) 259-6111
	Home: (801) 259-6239

Eric Jones, Petroleum Engineer	Office: (801) 259-6111
	Home: (801) 259-2214

If unable to reach the above individuals, please call the following:

Lynn Jackson,	Office: (801) 259-6111
Chief, Branch of Fluid Minerals	Home: (801) 259-7990

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: AMPOLEX 43-037-31688

WELL NAME: QUANTUM # 1

Section 20 Township 36S Range 24E County SAN JUAN

Drilling Contractor BIG "A"

Rig # 32

SPUDDED: Date 10/8/92

Time

How ROTARY

Drilling will commence

Reported by KEN WEST

Telephone # 1-259-2067

Date 10/7/92 SIGNED JLT



# 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 Quantum #1  
Section 20, T36S, R24E  
San Juan County, Utah

43-037-31688

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

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-62681**

6. If Indian, Allottee or Tribe Name

**N/A**

7. If Unit or CA, Agreement Designation

**Quantum**

8. Well Name and No.

**Quantum No. 1**

9. API Well No.

**43-037-31688**

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)

**2,052' FNL & 2,183' FWL SE NW  
Section 20-T36S-R24E**

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

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other

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

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

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

**9-5/8", 36# casing is J-55 instead of K-55.**

*10/15/92*  
*J.P. Matthews*  
**RECEIVED**

**OCT 15 1992**

**DIVISION OF  
OIL GAS & MINING**

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

Signed *Robert C. Arsenault* Title **Senior Petroleum Engineer**

Date **10/13/92**

(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.

**\*See Instruction on Reverse Side**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
OCT 30 1992  
DIVISION OF  
OIL, GAS & MINING

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 <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <b>DRY HOLE</b>	5. Lease Designation and Serial No. <b>U-62681</b>
2. Name of Operator <b>Ampolex (Texas), Inc.</b>	6. If Indian, Allottee or Tribe Name --
3. Address and Telephone No. <b>1225 17th Street, Suite #3000, Denver, CO 80202 (303) 297-1000</b>	7. If Unit or CA, Agreement Designation --
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>SE NW Section 20-T36S-R24E 2,183' FWL &amp; 2,052' FNL</b>	8. Well Name and No. <b>Quantum #1</b>
	9. API Well No. <b>43-037-31688</b>
	10. Field and Pool, or Exploratory Area <b>Wildcat</b>
	11. County or Parish, State <b>San Juan County, Utah</b>

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 checked="" 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 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.)\*

Desert Creek Formation not productive. Set cement plugs as follows:

65 sx 5,996' - 5,796'  
83 sx 4,527' - 4,327' (Tag plug after 4 hrs. WOC)  
84 sx 1,801' - 1,601'  
20 sx Surface

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

Signed Robert C. Greenaway Title Senior Petroleum Engineer Date 10/28/92

(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.

\*See Instruction on Reverse Side

**R**ESERVOIR

**I**NTERPRETATION

**S**ERVICES

**C**ORPORATION

**Prepared for :**

**Ampolex (USA), Inc.  
Quantum No. 1  
Sec. 20 T36S R24E  
San Juan County, Utah**

**RECEIVED**

NOV 05 1992

DIVISION OF  
OIL GAS & MINING

**CONFIDENTIAL**

**R**ESERVOIR

**I**NTERPRETATION

**S**ERVICES

**C**ORPORATION

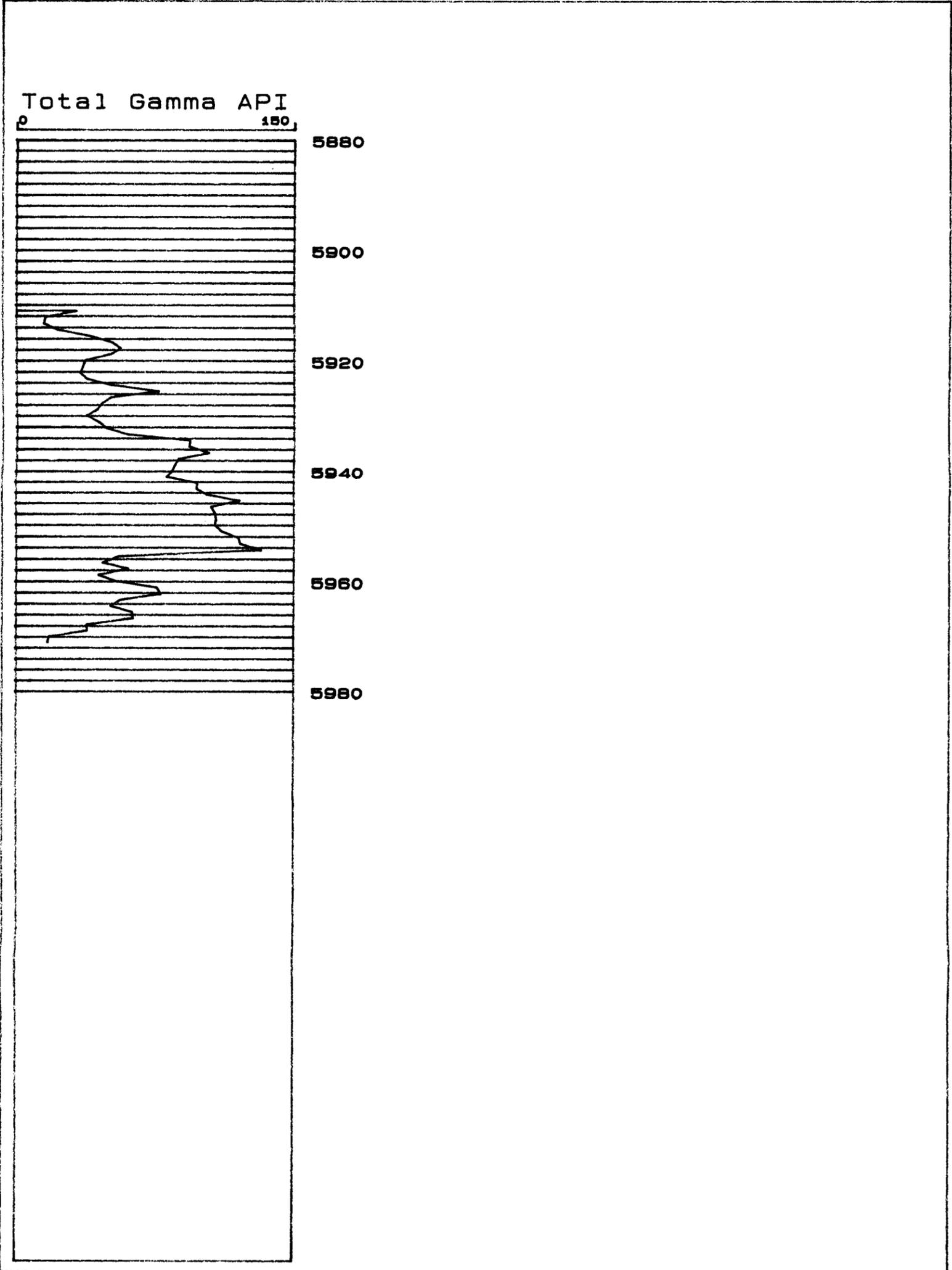
**Prepared for :**

**Ampolex (USA), Inc.** DRL SENW  
**Quantum No. 1** 43-037-31688  
**Sec. 20 T36S R24E** 205250L 21835WL  
**San Juan County, Utah** (Surface)

# CORE GAMMA RAY LOG

Reservoir Interpretation Services Corp.

Company: Ampolex (USA) Inc.                      Date: 10-29-1992  
Field Name: Wildcat                                      Core Number: #1  
Well Number: Quantum #1                      Core Interval:  
Log Type: Total Gamma                                      5911- 5971  
Depth Scale: 1 inch=20 Feet Data File Name: 210AMP06





# 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

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 - Quantum 1  
SENW Sec. 20, T. 36S, R. 24E - 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 Quantum 1, API Number 43-037-31688, on October 8, 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

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-62681**

6. If Indian, Allottee or Tribe Name

--

7. If Unit or CA, Agreement Designation

--

8. Well Name and No.

**Quantum #1**

9. API Well No.

**43-037-31688**

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)

**SE NW Section 20-T36S-R24E**

**2,183' FWL & 2,052' FNL**

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.)\*

**Desert Creek Formation not productive. Set cement plugs as follows:**

5,996' - 5,796' 65 SX  
 4,527' - 4,327' 83 SX (Tag plug after 4 hrs. WOC)  
 1,801' - 1,601' 84 SX  
 Surface 20 SX

**WELL PLUGGED AND ABANDONED.**

**RECEIVED**

**NOV 23 1992**

**DIVISION OF  
OIL GAS & MINING**

**cc: State of Utah**

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

Signed Robert L. Arceneaux Title Senior Petroleum Engineer Date 11/20/92

(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.

\*See Instruction on Reverse Side

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

5. LEASE DESIGNATION AND SERIAL NO.

U-62681

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

--

7. UNIT AGREEMENT NAME

Quantum

FARM OR LEASE NAME

Quantum

8. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wildcat - Desert Creek

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

Section 20-T36S-R24E

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

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

2. NAME OF OPERATOR  
Amplex (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 requirement)

At surface 2,052' FNL & 2,183' FWL

At top prod. interval reported below

At total depth (5,967')  
2,384' FNL & 2,112' FWL

**RECEIVED**

DEC 04 1992

DIVISION OF  
OIL GAS & MINING

14. PERMIT NO. 43-037-31688  
DATE ISSUED 09/04/92

15. DATE SPUDDED 10/09/92  
16. DATE T.D. REACHED 10/24/92  
17. DATE COMPL. (Ready to prod.) 10-27-92 PAID  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5,741' GR  
19. ELEV. CASINGHEAD --

20. TOTAL DEPTH, MD & TVD 5,997' MD  
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 Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN DLL/MSFL, FDC/CNL, LSS 11-4-92  
27. WAS WELL CORED Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1,701'	12-1/4"	980 SX	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

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  
Survey Listings

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Robert C. Arsenault TITLE Senior Petroleum Engineer DATE 11/23/92

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

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

cc: State of Utah

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Desert Creek	5,911'	5,971'	

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Shinarump	2,296'	
Cutler	2,382'	
Hermosa	4,427'	
Ismay	5,604'	
Lower Ismay	5,780'	
Desert Creek	5,682'	
Akah	5,952'	

# AMPOLEX INCORPORATED

Structure : SEC. 34-36S-24E

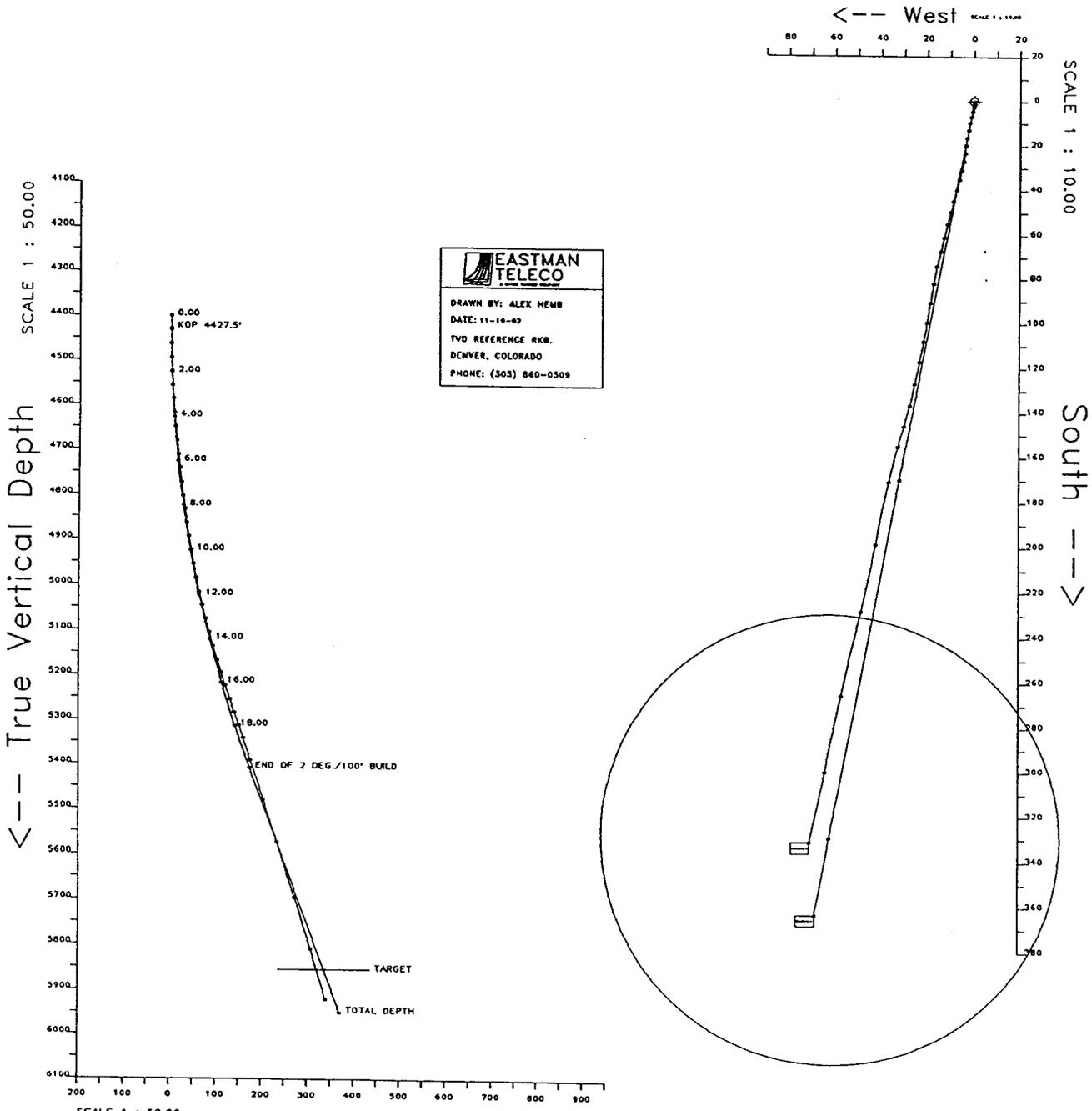
Well : QUANTUM NO. 1

Field : SAN JUAN COUNTY

Location : SAN JUAN COUNTY, UTAH

----- WELL PROFILE DATA -----

POINT	MD	INC	DIR	TVD	NORTH	EAST
TIE ON	0	0.00	190.64	0	0	0
KOP	4428	0.00	190.64	4428	0	0
END OF BUILD	5428	20.01	190.64	5408	-170	-32
TARGET	5904	20.01	190.64	5855	-330	-67
END OF HOLD	6005	20.01	190.64	5950	-364	-68



SCALE 1 : 50.00  
 Vertical Section on 190.64 azimuth with reference 0.00 N, 0.00 E from slot #2

AMPOLEX INCORPORATED  
SEC. 34-36S-24E

QUANTUM NO. 1  
slot #2  
SAN JUAN COUNTY  
SAN JUAN COUNTY, UTAH

SURVEY LISTING

Your ref : WS01-101792-JLG-4399  
Our ref : svy2609  
Other ref :

Date printed : 19-Nov-92  
Date created : 19-Oct-92  
Last revised : 26-Oct-92

Field is centred on n37 40 0.000,w109 15 0  
Structure is centred on n37 40 0.000,w109 15 0

**RECEIVED**

DEC 04 1992

DIVISION OF  
OIL GAS & MINING

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR COORDINATES		Dogleg Deg/100Ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
4399.00	0.00	0.00	4399.00	0.00 N	0.00 E	0.00	0.00
4431.00	0.20	23.70	4431.00	0.05 N	0.02 E	0.62	-0.05
4463.00	0.40	175.60	4463.00	0.01 S	0.05 E	1.82	0.00
4494.00	1.40	181.20	4494.00	0.50 S	0.05 E	3.23	0.48
4525.00	2.10	186.20	4524.98	1.44 S	0.02 W	2.31	1.42
4556.00	2.90	191.10	4555.95	2.77 S	0.23 W	2.67	2.77
4586.00	3.90	191.80	4585.90	4.52 S	0.58 W	3.34	4.55
4618.00	4.90	193.20	4617.80	6.91 S	1.12 W	3.14	7.00
4649.00	5.90	192.50	4648.66	9.76 S	1.76 W	3.23	9.91
4680.00	6.40	189.70	4679.49	13.02 S	2.40 W	1.88	13.23
4712.00	6.20	187.60	4711.29	16.49 S	2.93 W	0.95	16.74
4742.00	6.10	187.60	4741.12	19.67 S	3.35 W	0.33	19.95
4774.00	6.60	186.90	4772.92	23.18 S	3.80 W	1.58	23.49
4805.00	7.40	191.80	4803.69	26.90 S	4.42 W	3.22	27.26
4835.00	8.00	193.20	4833.42	30.83 S	5.29 W	2.10	31.28
4866.00	8.60	193.90	4864.10	35.18 S	6.34 W	1.96	35.75
4896.00	9.20	194.60	4893.74	39.68 S	7.49 W	2.03	40.38
4927.00	9.60	194.60	4924.32	44.58 S	8.76 W	1.29	45.43
4957.00	10.00	193.90	4953.88	49.53 S	10.02 W	1.39	50.52
4988.00	10.70	193.20	4984.38	54.94 S	11.32 W	2.29	56.09
5020.00	11.90	192.50	5015.76	61.05 S	12.72 W	3.77	62.35
5050.00	12.90	193.90	5045.06	67.32 S	14.19 W	3.48	68.79
5080.00	14.10	191.80	5074.23	74.15 S	15.74 W	4.32	75.78
5112.00	15.20	189.70	5105.19	82.10 S	17.24 W	3.82	83.88
5144.00	16.20	189.00	5135.99	90.65 S	18.65 W	3.18	92.53
5176.00	16.80	189.70	5166.68	99.62 S	20.13 W	1.98	101.62
5205.00	17.60	189.70	5194.38	108.07 S	21.57 W	2.76	110.19
5236.00	17.80	191.10	5223.91	117.34 S	23.28 W	1.52	119.62
5268.00	18.60	192.50	5254.31	127.12 S	25.32 W	2.85	129.61
5299.00	18.90	193.90	5283.66	136.82 S	27.60 W	1.74	139.56
5329.00	18.60	196.00	5312.07	146.14 S	30.08 W	2.46	149.18
5359.00	18.20	196.00	5340.54	155.24 S	32.69 W	1.33	158.61
5411.00	18.00	192.00	5389.97	170.90 S	36.60 W	2.42	174.72
5504.00	17.75	191.00	5478.48	198.88 S	42.30 W	0.42	203.26
5604.00	17.50	193.00	5573.78	228.49 S	48.58 W	0.66	233.53
5731.00	17.75	192.00	5694.82	266.03 S	56.91 W	0.31	271.96
5851.00	16.25	191.00	5809.58	300.40 S	63.91 W	1.27	307.04
5967.00	16.00	193.00	5921.01	331.92 S	70.61 W	0.52	339.24

ASSUMED VERTICAL

**RECEIVED**

DEC 04 1992

DIVISION OF  
OIL, GAS & MINING

All data is in feet unless otherwise stated  
 Coordinates are from slot #2 and TVDs are from wellhead.  
 Vertical section is from wellhead on azimuth 190.64 degrees.  
 Calculation uses the minimum curvature method.

AMPOLEX INCORPORATED  
 SEC. 34-36S-24E, QUANTUM NO. 1  
 SAN JUAN COUNTY, SAN JUAN COUNTY, UTAH

SURVEY LISTING Page 2  
 Your ref : WS01-101792-JLG-4399  
 Last revised : 26-Oct-92

Comments in wellpath

MD	TVD	Rectangular Coords.		Comment
4399.00	4399.00	0.00 N	0.00 E	ASSUMED VERTICAL

Targets associated with this wellpath

Target name	Position	T.V.D.	Local rectangular coords.	Date revised
	not specified	5855.00	330.00S 62.00W	24-Jul-92

**RECEIVED**

DEC 04 1992

DIVISION OF  
 OIL GAS & MINING

All data is in feet unless otherwise stated  
 Coordinates are from slot #2 and TVDs are from wellhead.  
 Slot coordinates are 0.00 N 0.00 E.  
 Bottom hole distance is 339.34 on azimuth 192.01 degrees from wellhead.  
 Vertical section is from wellhead on azimuth 190.64 degrees.  
 Calculation uses the minimum curvature method.

**CONFIDENTIAL**

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

RECEIVED  
APR 1 1993

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <b>DRY HOLE</b>		5. Lease Designation and Serial No. <b>U-62681</b>
2. Name of Operator <b>Ampolex (Texas), Inc.</b>		6. If Indian, Allottee or Tribe Name ---
3. Address and Telephone No. <b>1225 17th Street, Suite #3000, Denver, CO 80202 (303) 297-1000</b>		7. If Unit or CA, Agreement Designation ---
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>SE NW Section 20-T36S-R24E 2,183' FWL &amp; 2,052' FNL</b>		8. Well Name and No. <b>Quantum #1</b>
		9. API Well No. <b>43-037-31688</b>
		10. Field and Pool, or Exploratory Area <b>Wildcat</b>
		11. County or Parish, State <b>San Juan County, Utah</b>

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 checked="" type="checkbox"/> Other <b>ADDED P&amp;A DATE</b>
	<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.)\*

Desert Creek Formation not productive. Set cement plugs as follows:

- 5,996' - 5,796' 65 sx
- 4,527' - 4,327' 83 sx (Tag plug after 4 hrs. WOC)
- 1,801' - 1,601' 84 sx
- Surface 20 sx

WELL PLUGGED AND ABANDONED 10/27/92.

cc: State of Utah

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

Signed Robert C. Arceneaux Title Senior Petroleum Engineer Date 03/30/93

(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

**CONFIDENTIAL**

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

NOV 15 1993

1. Type of Well

Oil Well  Gas Well  Other **DRY HOLE**

2. Name of Operator

**Ampolex (Texas), Inc.**

DIVISION OF  
OIL, GAS & MINING

3. Address and Telephone No.

**1050 17th Street, Suite #2500, Denver, CO 80265 (303) 595-9000**

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

**SE NW Section 20-T36S-R24E  
2,183' FWL & 2,052' FNL**

5. Lease Designation and Serial No.

**U - 62681**

6. If Indian, Allottee or Tribe Name

--

7. If Unit or CA, Agreement Designation

--

8. Well Name and No.

**Quantum #1**

9. API Well No.

**43-037-31688**

10. Field and Pool, or Exploratory Area

**Wildcat**

11. County or Parish, State

**San Juan County, Utah**

2. 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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" 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.)\*

**Reserve pit back-filled, wellsite re-countoured, topsoil re-placed and re-seeding per A.P.D. stipulations completed.**

cc: State of Utah

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

Signed Robert C. Greenaway Title Senior Petroleum Engineer

Date November 11, 1993

(This space for Federal or State office use)

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

Title \_\_\_\_\_

Date \_\_\_\_\_

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