

**FILE NOTATIONS**

Entered in NID File ..... ✓

Location Map Pinned ..... ✓

Card Indexed ..... ✓

Checked by Chief .....

Approval Letter .....

Disapproval Letter .....

**COMPLETION DATA:**

Date Well Completed .....

Location Inspected .....

OW..... WW..... TA.....

Bond released

GW..... OS..... PA.....

State or Fee Land .....

**LOGS FILED**

Driller's Log.....

Electric Logs (No.) .....

E..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... MI-L..... Sonic.....

GMLog..... CLog..... Others.....

*MKS*  
11-14-90

Cabot Corp.  
Cedar City #1  
(Slides - Feb. - '78)

*Robert E. McDonald*

— GEOLOGIST —  
Suite 214, 1228 15th Street  
Denver, Colorado 80202  
(303) 534-0469  
November 30, 1977



Mr. Ed Guynn  
Conservation Division  
U. S. Geological Survey  
8426 Federal Building  
125 South State Street  
Salt Lake City, Utah 84138

Re: Cabot Corporation  
Cedar City Unit #1  
CNENE section 29, T. 36 S., R. 11 W.  
Iron County, Utah

Dear Mr. Guynn:

Mr. Gerald Myers, Cabot Corporation, Pampa, Texas, and myself have written you previously regarding the above captioned proposed test well. In my last letter I outlined a proposed time table for finishing my Notice of Intent and Multipoint Plan, in view of our imminent lease expiration on January 29, 1978. I am happy to report that we still seem to be on schedule, and I am enclosing for your review and approval our "Notice of Intent to Drill" (Form 9-331) and the Multi Point Plan covering the above captioned test well. I am also enclosing Cabot's drilling bond. It is my understanding that Chevron (record owner of the oil and gas lease on which we will drill) has sent a Designation of Operator to Cabot Corporation, and Cabot has in turn mailed this to the Bureau of Land Management.

On Wednesday, November 23, I was in Cedar City and spent a day examining the location, the possible access roads, surface geology, water sources, etc., and developed much of the information utilized in the accompanying Multi Point Plan. Mr. Bill Dalness, Bureau of Land Management geologist, also visited the location and felt that it posed no problem insofar as the BLM is concerned. It is my understanding that his conclusion is subject to approval of his supervisor, however. I also spoke with Dr. Richard Thompson, archaeologist, Southern Utah State University, who examined the location the day before. Dr. Thompson reports that he found no objections to the proposed well site, and has informed the Bureau of Land Management of his findings.

If there is more information I can furnish you or be of further assistance in any way, please do not hesitate to call me.

Very truly yours,

Robert E. McDonald

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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  
 Cabot Corporation

3. ADDRESS OF OPERATOR  
 1228 15th Street  
 c/o Robert McDonald, 214 Granite Bldg., Denver, Col. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 660' FNL & 660' FEL (NE $\frac{1}{4}$  NE $\frac{1}{4}$ )  
 At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.  
 U-4956

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 No

7. UNIT AGREEMENT NAME  
 Cedar City (proposed)

8. FARM OR LEASE NAME  
 Federal

9. WELL NO.  
 Unit #1

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 sec. 29, T. 36 S., R. 11 W., SLM

12. COUNTY OR PARISH      13. STATE  
 Iron      Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 2 $\frac{1}{2}$  miles southwest of Cedar City (about 3 $\frac{1}{2}$  miles by road)

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 660'

16. NO. OF ACRES IN LEASE  
 1430

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 None

19. PROPOSED DEPTH  
 5200 feet

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5932 natural ground

22. APPROX. DATE WORK WILL START\*  
 January 25, 1978

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	11 3/4"	42#	500'	To Surface
8 3/4"	5 1/2"	14#	Through oil/gas zones.	500 sx or more if needed (more than one prod. zone, or badly washed hole.)

It is proposed to drill this development well to a depth of 5200 feet to test the Queantoweap Sandstone (Pennsylvanian).

Attached: Form 9-331 with Drilling Program  
 Surveyors Plat  
 Well control Requirements  
 Multi-point Surface Use Plan w/ attachments.



3-USGS  
 1-State of Utah  
 2-Cabot Houston  
 2-Cabot Pampa

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 [Signature] TITLE Agent DATE 11/30/77

(This space for Federal or State office use)

PERMIT NO. 43-021-30003 APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

OPERATOR: CABOT CORPORATION  
P.O. BOX 1101  
PAMPA, TEXAS 79065

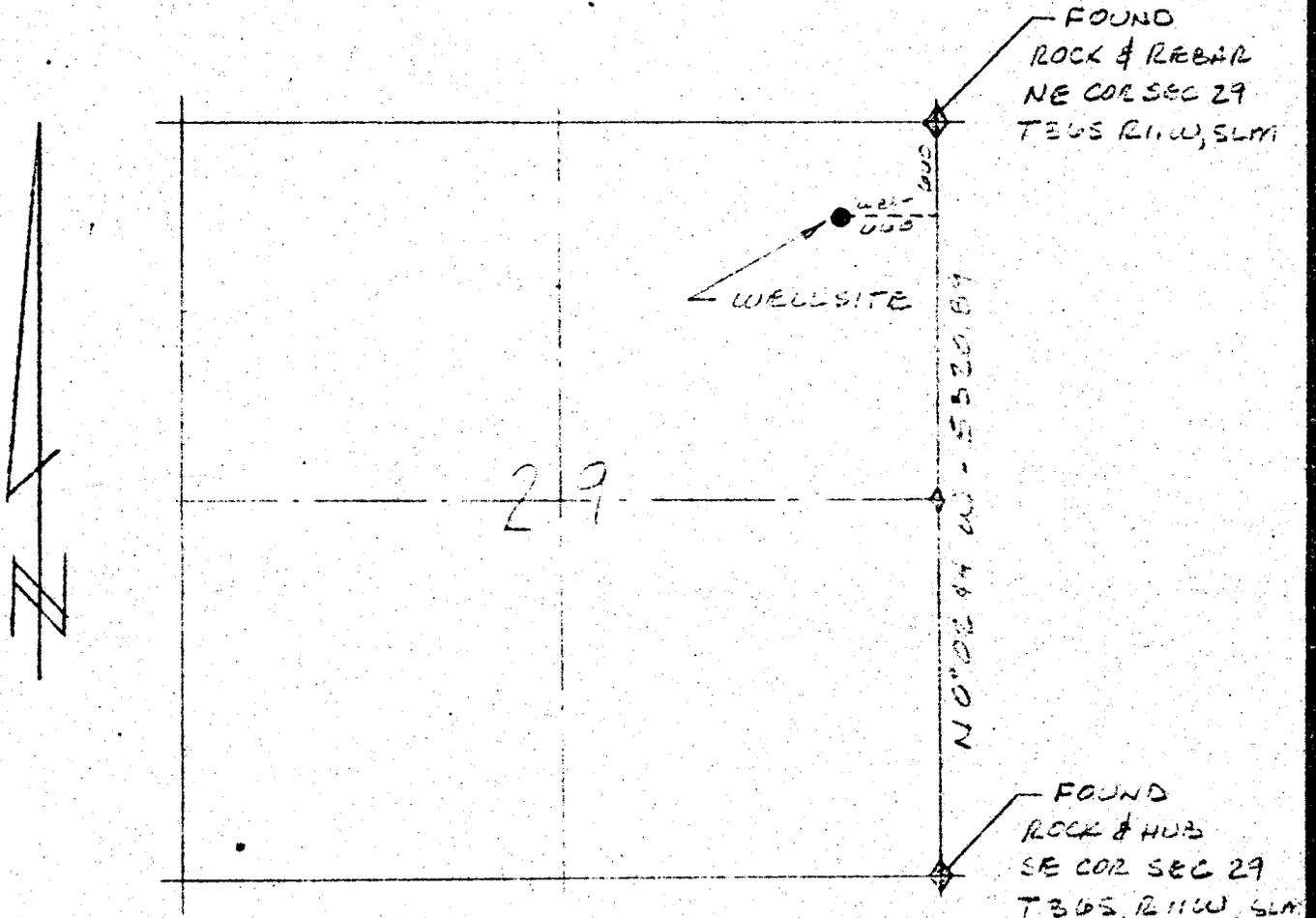
WELL NUMBER: CEDAR CITY UNIT #1

LOCATION: SECTION 29, T36S, R11W, SLM

COUNTY: IRON

STATE: UTAH

ELEVATION: 5932 gn



**BULLOCK BROS.  
ENGINEERING INC.**  
CEDAR CITY, UTAH

WELL LOCATION  
FOR  
CABOT CORP  
PAMPA, TEXAS

DATE	11/23/77
SCALE	1" = 1320'
DRAWN	NLR

*Robert E. McDonald*

— GEOLOGIST —  
Suite 214, 1228 15th Street  
Denver, Colorado 80202  
(303) 534-0469  
December 5, 1977



Oil and Gas Conservation Commission  
State of Utah  
1588 West North Temple  
Salt Lake City, Utah 84116

Re: Cabot Corporation  
Cedar City Unit #1  
CNENE section 29, T. 36 S., R. 11 W.  
Iron County, Utah

Dear Sir:

I am attaching our Application for Permit to Drill the above captioned test well. This falls on Fedearl lands, and I am including all forms, plans and materials furnished the U. S. Geological Survey. If there are any further requirements by the State of Utah, please let me know.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert E. McDonald".

Robert E. McDonald

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIP  
(Other instruction  
verse side)

TE-  
re-

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-4956

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

No

7. UNIT AGREEMENT NAME

Cedar City (proposed)

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Unit #1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

sec. 29, T. 36 S.,  
R. 11 W., SLM

12. COUNTY OR PARISH

Iron

13. STATE

Utah

1. OIL WELL  GAS WELL  OTHER  Wildcat

2. NAME OF OPERATOR

Cabot Corporation

3. ADDRESS OF OPERATOR

214 Granite Building, 1228 15th Street, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)

At surface

660 feet from north line, 660 feet from east line  
section 29, T. 36 S., R. 11 W., SLM  
Iron County, Utah

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5932 ntl. grnd.

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

Drill

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

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

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

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

1. Surface Formation: Late Tertiary basalts and fluvial sands and gravels (interbedded)  
Rotary tools will be used from surface to total depth.  
Proposed Total Depth is 5200 feet.

2. Estimated Formation tops are as follows:

Tertiary	Surface
Triassic	
Moenkopi	1000'
Timpoweap	4200'
Permian	
Kaibab	4300'
Toroweap	4600'
Pennsylvanian	
Queantoweap	5000'

3. Primary objectives for oil or gas are the Kaibab, Toroweap and Queantoweap. If these formations are not oil bearing, they will probably carry brackish water. No other water bearing strata or important minerals are anticipated.

4. Casing program is as follows: Surface casing - 500 feet 11 3/4", 42#, "H", ST & C, new.

(Continued on attached page)

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

SIGNED

TITLE

Agent

DATE

11/30/77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

OPERATOR: CABOT CORPORATION  
P.O. BOX 1101  
PAMPA, TEXAS 79065

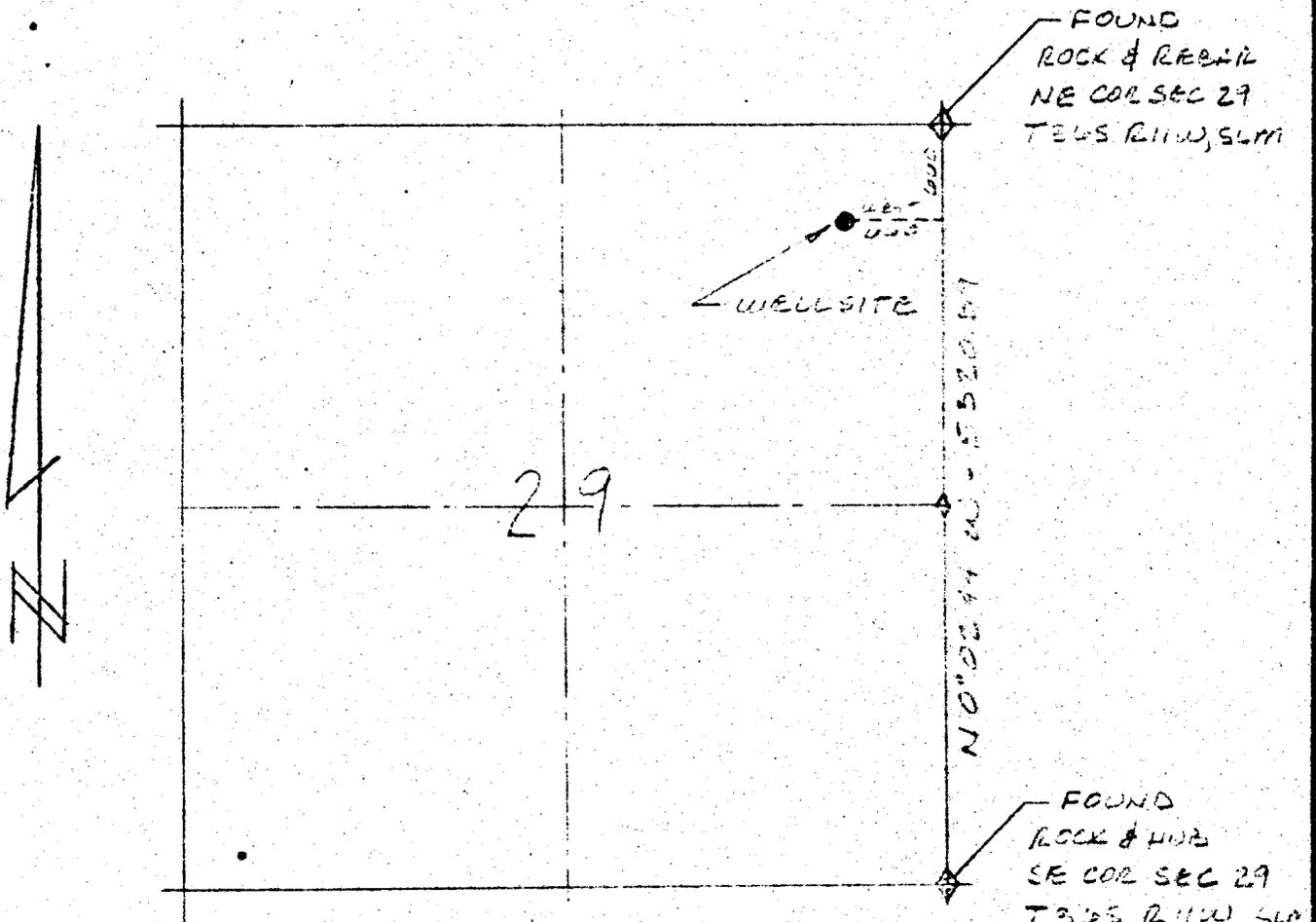
WELL NUMBER: CEDAR CITY UNIT #1

LOCATION: SECTION 29, T36S, R11W, SLM

COUNTY: IRON

STATE: UTAH

ELEVATION: 5932 gn



**BULLOCH BROS.  
ENGINEERING INC.**  
CEDAR CITY, UTAH

WELL LOCATION  
FOR  
CABOT CORP  
PAMPA, TEXAS

DATE	11/23/77
SCALE	1" = 1320'
DRAWN	NLZ

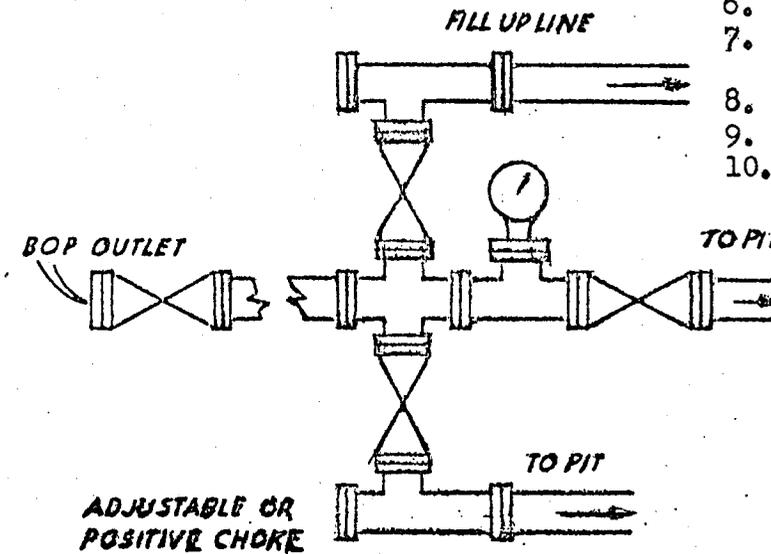
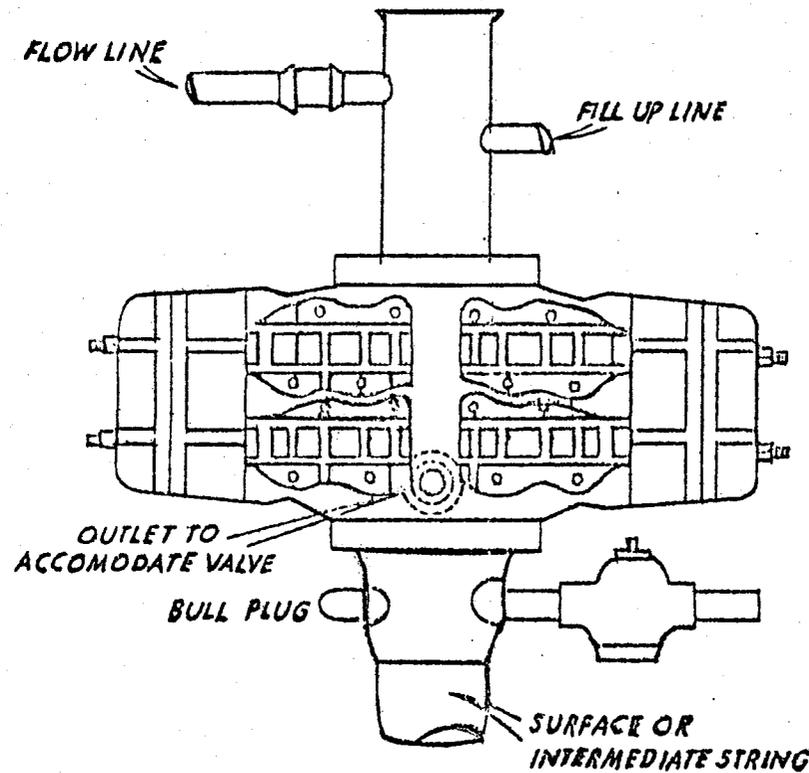
Supplemental Page to accompany Form-331C  
Cabot Corporation  
Cedar City Unit #1  
NENE section 29, T. 36 S., R. 11 W  
Iron County, Utah

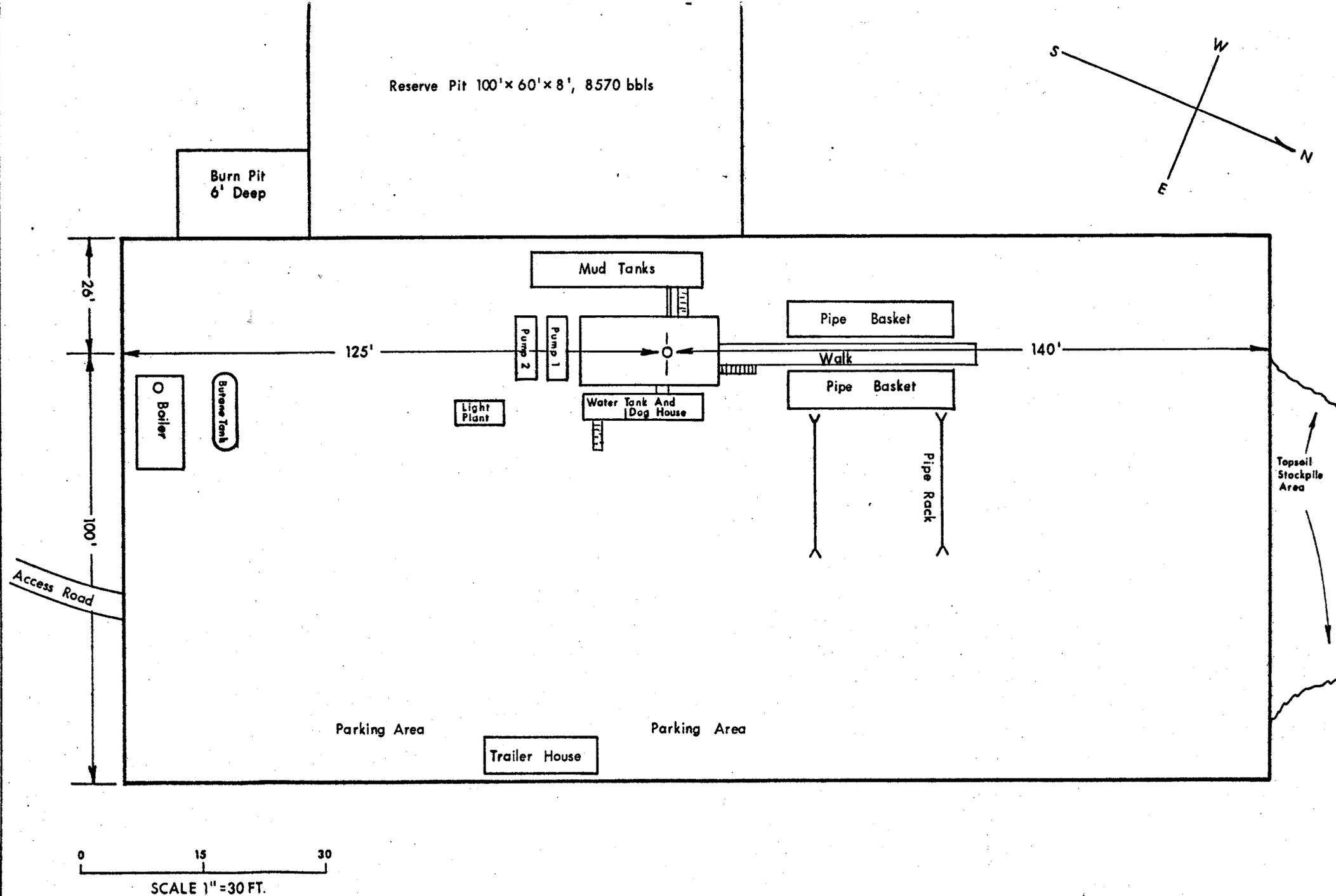
Production casing - 5200 feet 5 1/2", 14#  
"J-55", ST & C, new.

5. For minimum pressure control equipment and testing procedures, see attached diagram.
6. Mud Program: Water will be used as circulating medium to about 3800 feet, where mudding up will commence. Gel will be added as necessary to keep hole clean. Below 3800 feet, a gel-chemical mud will be utilized, with weight maintained between 9.0 - 9.2 lbs./gal., viscosity about 40, and a water loss of about 6.0 cc. Adequate stock of lost circulation and weight material will be maintained for unanticipated problems.
7. Auxiliary safety equipment to be utilized includes a kelly cock, float at the bit, and a sub on floor with full opening valve to be stabbed into drill pipe when kelly is not in string. A mud gas detection unit, manned 24 hours a day, will be employed from the base of surface string to total depth, and mud level of pits will be monitored by visual observation.
8. No coring is currently planned on this well.  
Testing of all significant shows of oil and/or gas is planned, testing to be accomplished by open hole formation tester as soon as practical after show is detected.  
Logging program shall include Dual Induction Electric Log, CNL-FDC with Gamma Ray, BHC-Sonic with Gamma Ray, and Dipmeter. All logs will be run from the base of surface casing to total depth, unless prohibited by mechanical problems.
9. No abnormally high pressures or temperatures are expected. The results of nearby drilling suggest the area is subnormally pressured, and pressure gradients are expected to be in the .30 to .32 range. Lost circulation is anticipated, and a stock of lost circulation material will be on hand. There is no history of hydrogen sulphide or other abnormal drilling hazards in the immediate area, nor are they expected in the Cedar City Unit #1.
10. It is anticipated that the well will commence on or about January 25, 1978, and take about 60 days to drill. There is a lease expiration of January 29, 1978, and the well must be drilling on that date.

CABOT CORPORATION, PAMPA, TEXAS  
 Cedar City Unit #1, sec. 29, T. 36 S., R. 11 W.  
 Minimum Pressure Control Equipment  
 Testing Procedures

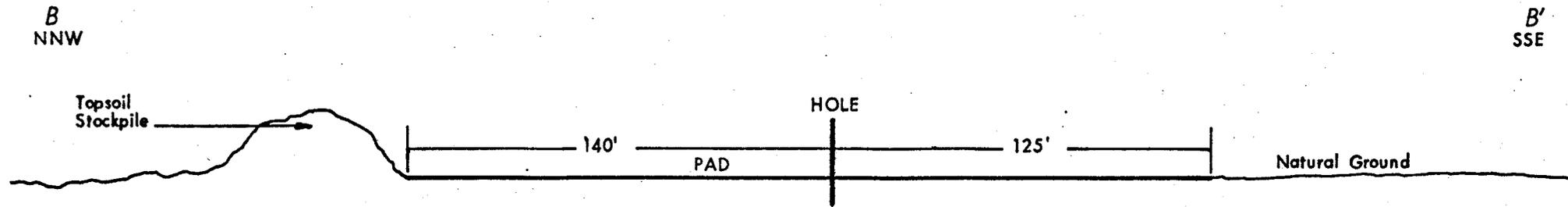
1. All BOP valves and all working fittings will be in good working condition.
2. All bolts will be installed and tight.
3. All valves to be 3000# W. P. or better.
4. After nipping up, test rams and pressure up to 1000#
5. All crew members will be familiarized with BOP and accumulators.
6. Pipe rams tested every 24 hours.
7. Blind rams tested every 24 hours, or when out of hole for trip if not possible each 24 hr.
8. Keep hole full during trips.
9. Only flange type fittings will be used.
10. Recheck bolts for tightness before reaching 4000 feet (first possibly productive zone at 4300).
11. When drilling use: (a) top preventer-drill pipe rams, bottom preventer blind pipe rams.
12. When running casing use: (b) top preventer casing rams, bottom preventer blind rams.



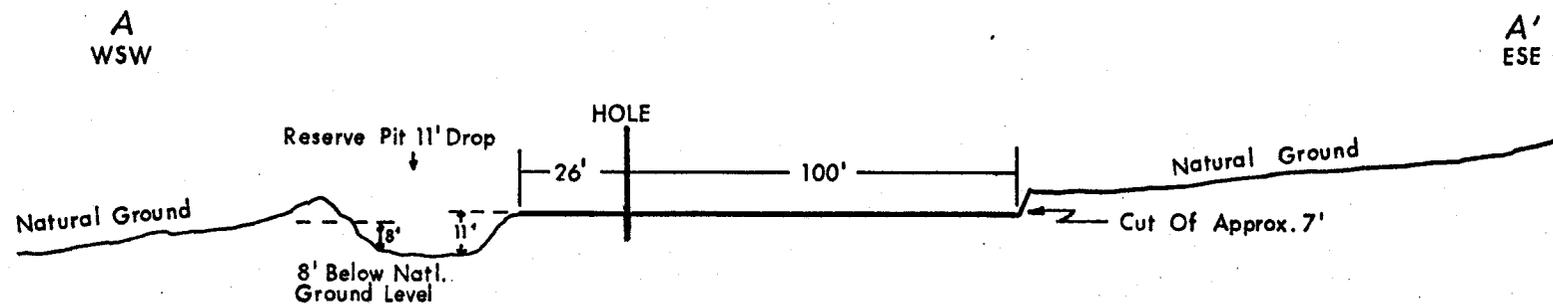


**FIGURE 1**

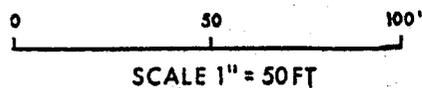
CABOT CORPORATION  
 CEDAR CITY UNIT #1  
 NE NE SECTION 29, T36S, R11W  
 IRON COUNTY, UTAH



PLAN VIEW OF LOCATION LOOKING  
ENE THROUGH CEDAR CITY UNIT #1  
NO FILL AND VERY LITTLE IF ANY  
CUTTING NECESSARY AT THIS ELEVATION

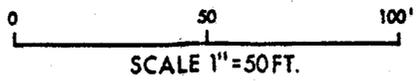
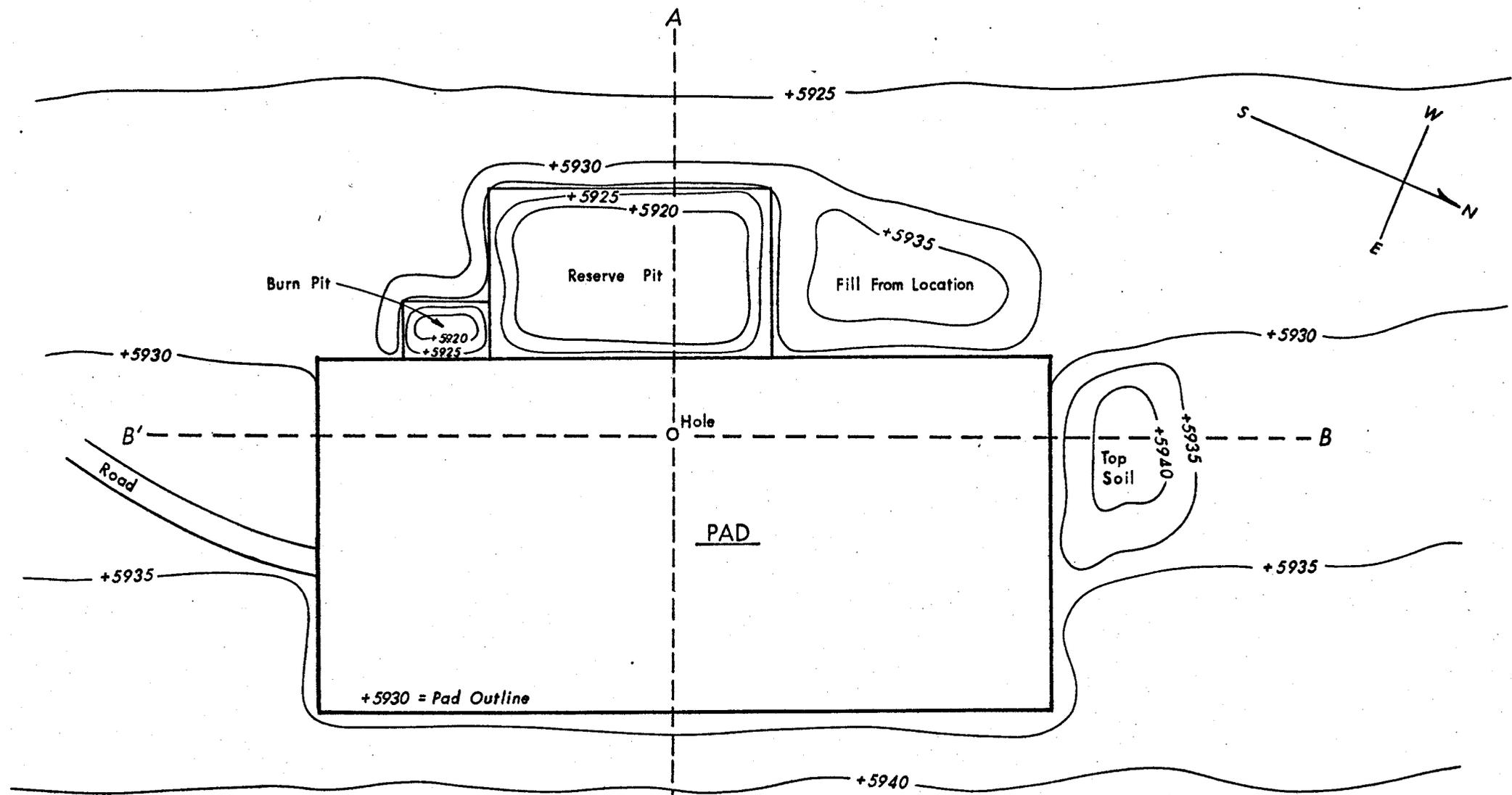


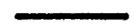
PLAN VIEW OF LOCATION LOOKING  
NNW THROUGH CEDAR CITY UNIT #1  
NO FILL AT THIS ELEVATION, WHERE  
RIG IS SITTING. CUT OF ABOUT 7'  
NECESSARY ON ESE SIDE. RESERVE  
PIT ON WSW, 8' DEEP BY ABOUT 60'  
WIDE.



**FIGURE 2**

CABOT CORPORATION  
CEDAR CITY UNIT #1  
NE NE SECTION 29, T36S, R11W  
IRON COUNTY, UTAH



-  LOCATION OUTLINE
-  CONTOUR LINE
-  LINE OF SECTION

**FIGURE 3**  
 TOPOGRAPHIC MAP DURING  
 DRILLING OPERATIONS  
 CABOT CORPORATION  
 CEDAR CITY UNIT #1

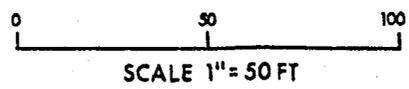
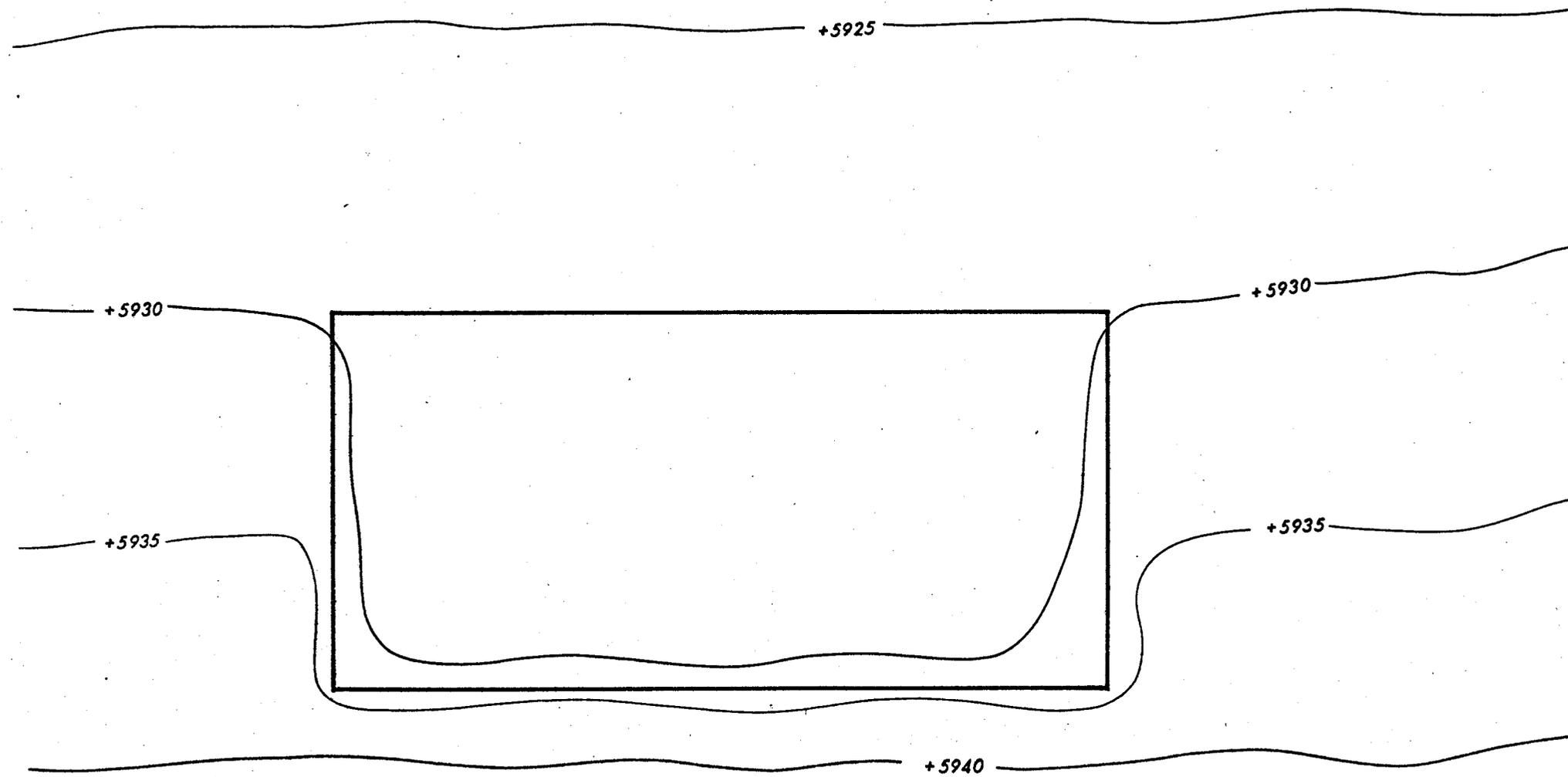


FIGURE 4  
CABOT CORPORATION  
CEDAR CITY UNIT #1  
TOPOGRAPHIC MAP  
OF REHABILITATED LOCATION

CABOT CORPORATION  
CEDAR CITY UNIT #1  
660 f/N line, 660 f/E line, section 29  
T. 36 S., R. 11 W., SLM,  
Iron County, Utah

MULTI POINT PLAN TO ACCOMPANY FORM 9-331C

1. Existing Roads

- A. The accompanying plat shows the Cedar City Unit #1, as staked by Bulloch Brothers Engineering, Inc., 62 North 33 East, Cedar City, Utah 84720. The staking included 200-foot reference stakes marked with orange flagging.
- B. Route to well site is indicated on accompanying topographic maps. From Cedar City, proceed southwest on old U. S. 91 for one mile. Just before reaching the Interstate, turn right on the road marked "I-15 Northbound", but instead of making a second right to gain access to northbound I-15, proceed straight ahead under the Interstate and then bear left on the paved road. This road goes past the race track ("The Iron Bowl", on the topo sheet) and parallels the Interstate southwest for about  $1\frac{1}{2}$  miles. The road then bears right and the pavement ceases at this point, which occurs in the SWSW section 28, T. 36 S., R. 11 W. Continue up the hill on the dirt road (shown in the E $\frac{1}{2}$  section 29 on topo sheet) for one mile, at which point location and reference stakes may easily be observed from road. While going up the hill after leaving the pavement, several different roads will be observed weaving through the junipers. This area has apparently served as a dump for Cedar City in the past, and still is used by local residents with trail bikes and off road vehicles. By staying more or less on the best travelled road or roads and continuing in a northerly direction, one ends up on the road past the location.
- C. Access roads are colored red and labelled on the accompanying topographic maps.
- D. All existing roads within 3-mile radius are indicated on topographic map, with the exception of new housing subdivisions located in SE $\frac{1}{4}$  section 9, SW $\frac{1}{4}$  section 10 and section 15. These roads provide no additional access to the well site. Type of surface is indicated.
- E. Not applicable.
- F. It was determined from surface examination that the existing unimproved road in the E $\frac{1}{2}$  section 29 and shown terminating at the paved road in the SW section 28 will be used for access. This road is solid, well packed, and grades are not too great for the anticipated truck traffic. It was decided in conjunction with Bureau of Land Management personnel that the less the existing road bed was disturbed, the better it would be environmentally and for vehicular traffic. Minimal improvement of the existing

road is anticipated. If the access road becomes difficult to traverse for any reason, such as substantial rain and snow, local maintaining equipment will be employed to grade road or make other appropriate repairs.

## 2. Planned Access Roads

A. The access road to the location is the road on the accompanying topographic map, located in the E $\frac{1}{2}$  section 29 and shown terminating at the paved road in the SW $\frac{1}{4}$  section 28, T. 36 S., R. 11W.

- (1) Width. The width varies, and plan is to utilize existing road.
- (2) Maximum Grade. The maximum grade on the access road is 8%. This occurs in the SENE section 29, where the elevation rises from 5880 feet to 5920 feet (40 feet vertically) in a horizontal distance of 500 feet.
- (3) Turnouts. Construction of turnouts are not planned. The nature of this road is such that natural turnouts are abundant because of its prior use as dump and recreational vehicle area.
- (4) Drainage Design. No new drainage planned. Erosion will be minimized by leaving old hard surface dirt and rock road intact.
- (5) Location and size of culverts and brief description of any major cuts and fills. No culverts will be necessary. There will be no fills nor cuts of significance.
- (6) Surface material. Surface material will be natural, consisting of numerous gravel, cobble and rocks imbedded in a very hard clay-like soil.
- (7) Necessary gates, cattleguards, or fence cuts. None required.
- (8) Center-line flagging of new or reconstructed roads. New roads are not required since location falls immediately adjacent to existing road. Access road was not flagged, since it is presently in service and flagging would not be practical.

## 3. Location of Existing Wells

A. There are no known producing oil and/or gas wells within a two mile radius, nor are there any unsuccessful test wells within that distance. On surface examination, no water wells were located within a two mile radius, nor were those questioned that live in the area aware of any water wells.

## 4. Location of Existing and Proposed Facilities

Page 3

A. There are no existing facilities of any kind owned or controlled by the operator within a 1-mile radius of the proposed well site.

B. New facilities contemplated in the event of production.

(1) No facilities nor lines are contemplated off the well pad. In the event such facilities should appear desirable in the future, an amended plan will be filed.

(2) Dimensions of facilities. These cannot be intelligently predicted at this time. In the event of a dry gas well, only a dehydrator and perhaps a separator would be necessary, occupying an area of perhaps 25 feet x 50 feet. In the event of an oil well, a tank or tanks and probably a separator would be necessary, but these would be planned after the productive capacity of the well and the nature of the produced hydrocarbons and associated fluids can be ascertained. An amended plan will be filed if such facilities are to be constructed.

(3) Construction methods and materials. Only experienced oil field supervisory personnel and skilled technicians and labor would be employed in construction of production facilities. Only new or completely reconditioned materials in "like new" condition would be used in all phases of any production facility.

(4) Protective measures and devices to protect livestock and wildlife. The exact livestock and wildlife protection program would depend on equipment installed. Production facilities will be fenced, as well as any sumps or pits. Permanent pits will be lined with approved materials. Any other protective measures or devices deemed appropriate for the production facilities utilized will be employed. During drilling, reserve and burn pits will be fenced on three sides, and on all four sides after rig release.

C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed.

Top soil will be stockpiled at one end of location. Pits will be fenced off until dry. After well has been abandoned if dry or production facilities completed if a producer, and after pits have dried out, pits will be filled and levelled and topsoil distributed back across location and pit area. Area appears to perhaps be in a sheep trail and scarcely any vegetation could be observed except sagebrush and a few juniper trees. The operator is open to suggestions from the Bureau of Land Management regarding the most efficacious reseeding plan.

5. Location and Type of Water Supply

Page 4

- A. Location and Type of Water Supply. Water will be purchased from the city of Cedar City. The water can either be picked up from a small reservoir located at the water tanks shown in the NE $\frac{1}{4}$  section 28 on the topographic map, or from a standpipe in the city of Cedar City.
- B. Method of Transporting Water. Water will be transported by water tank truck along the existing roads shown on the topographic map. No special roads, pipelines or facilities will be constructed for water.
- C. Water Well. No water well will be drilled.
6. Source of Construction Materials
- A. No construction materials are anticipated. The road is firm and considered quite usable without bringing in additional rock or gravel. The pad will be used natural, and additional gravel or other materials is not anticipated.
- B. Not applicable. No material will be brought in.
- C. Not applicable. No material will be brought in.
- D. Not applicable. No access roads to construction materials needed.
7. Methods for Handling Waste Disposal.

Methods and location of proposed containment and disposal of waste material:

- (1) Cuttings. Cuttings will be contained in reserve pit and covered when dry.
- (2) Drilling Fluids. Drilling fluids will all be confined to mud tanks and reserve pit. Reserve pit will be fenced and covered when dry.
- (3) Produced fluids. All produced fluids will be swabbed or flowed into a closed tank.
- (4) Sewage. Human wastes will be contained by portable toilet on location.
- (5) Garbage and other waste material. An effort will be made to keep location area clean and not allow garbage and waste material to accumulate. Necessary garbage will be confined to burn pit next to reserve pit, which will be fenced by wire adequate to prevent spreading of trash by wind.
- (6) Cleanup plan when rig moves out. When the rig moves off location, the location and immediate area will be policed for trash and any debris as a result of drilling operations. The reserve pit, which will already be fenced on three sides, will be fenced on the fourth side until it is sufficiently dry to be covered. Any flammable material in burn pit will be ignited, and fence will remain around burn pit. When the reserve pit can be covered, fences will be removed and location levelled according to rehabilitation plan.

Page 5

8. Ancillary Facilities

There will be no camps, airstrips or living facilities constructed on/or near the location. Only small mobile home type trailers will be moved onto the regular location pad for supervisory personnel as offices and temporary sleeping accommodations.

9. Well Site Layout

- (1) Cross section of drill pad. See attached diagram, Figure 2.
- (2) Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities, and soil material stockpiles. See attached diagram, Figure 1.
- (3) Rig orientation, parking areas and access roads. See attached diagram, Figure 1.
- (4) Pits will be unlined for drilling operations.

10. Plans for Restoration of Surface

- (1) Backfilling, leveling, contouring, waste disposal. See attached diagrams, Figure 3 and 4. Burn pit will be provided for trash, which will be fenced with fencing sufficiently small in gauge to prevent scattering of debris by wind. All noncombustible waste material will be buried in burn and reserve pits when they are filled and levelled.
- (2) Revegetation and rehabilitation. Reseeding will be accomplished subsequent to filling and leveling of reserve and burn pits and redistribution of topsoil across location. The reseeding will be according to direction of the Bureau of Land Management.
- (3) Pits will be fenced in their entirety prior to moving rig from location. The fencing will not be removed until pits are dry and ready to be filled and levelled.
- (4) If operations result in oil on reserve pit, oil will be pumped out prior to moving off rig. If for any reason all oil cannot be removed from pit, oil will be burned after obtaining burn permit from state.
- (5) It is anticipated that drilling operations will be completed in February or March 1978. The pits will probably not dry out for at least a couple of months, or perhaps longer depending on the amount of spring moisture. It is anticipated that pits should be dry by June 1978. If so, rehabilitation should commence at that time, or as soon thereafter as feasible. The work should take only a few days. Reseeding will then be accomplished either immediately following the dirt work or at some alternate time recommended by the Bureau of Land Management.

11. Other Information

Cabot Corporation  
Cedar City Unit #1  
section 29, T. 36 S., R. 11 W  
Iron County, Utah

Page 6

- (1) Topography. Gently rolling. Across area of location, slope is about 5%.  
Soil Characteristics. Soil at location is soft, sandy, appears to be well drained and easily worked.  
Geologic Features. The subsoil geology in the immediate vicinity appears to be alternating basalt flows and poorly consolidated sandstone and gravel beds.  
Flora and Fauna. The location area is covered by sagebrush and a few scattered juniper trees. There didn't appear to be any significant grasses, even the usual desert grass. The area appears to be along a sheep drive way, which may account for the sparseness of grass. No wildlife was observed during inspection of the area, although the usual desert creatures probably exist in the area. The closeness to Cedar City and the apparent use of the area by local residents probably keeps wildlife rather minimal, however.
- (2) Surface-use activities and surface ownership of all involved lands. All of section 29 is owned by the United States Government, both surface and subsurface. The Bureau of Land Management is the surface manager. A portion of the access road in the SW $\frac{1}{4}$  section 28 (see topographic map) is on land beneath which the United States Government owns the minerals, but the surface is owned by Max Thorley, Cedar City, Utah. Mr. Thorley has been contacted and has agreed to give Cabot Corporation right-of-way across that part of the existing road in section 28 for the purposes of drilling the Cedar City Unit #1.
- (3) Water. There is no surface water near the location. Arrangements have been made to purchase water from the City of Cedar City for the drilling of Cedar City Unit #1.  
Occupied Dwellings. The closest occupied dwellings appear to be two relatively new homes built just northwest of the highway labelled U. S. 91 on the accompanying topographic map. These homes would fall in the SW quarter of section 28, T. 36 S., R. 11 W., and will be approximately 4000 feet southeast of the well site.  
Archeological, historical or cultural sites. The location has been examined by Dr. Richard A. Thompson, Southern Utah State University, and it is his opinion that no archeological, historical or cultural sites will be disturbed by the Cedar City Unit #1 location as proposed. Dr. Thompson was given the dimensions and orientation of the drill pad and pits, and thoroughly examined all areas that might be affected.

12. The Cabot Corporation representative responsible for compliance with the approved surface use and operations plan is:

Mr. Robert E. McDonald  
214 Granite Building  
1228 15th Street  
Denver, Colorado 80202  
Phone: 303-534-0469

Cabot Corporation  
Cedar City Unit #1  
section 29, T. 36 S., R. 11 W  
Iron County, Utah

Page 7

13. I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herin will be performed by Cabot Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

---

November 30, 1977

---

Robert E. McDonald  
Geologist  
Cabot Corporation Representative

OPERATOR CABOT Corp  
 LEASE # U-4956  
 WELL NO. Fed Unit #1  
 LOC. NE 1/4 NE SEC. 29  
T. 36S R. 11W  
 COUNTY IRON STATE UT  
 FIELD Wildcat  
 USGS EVANS  
 BLM DALNESS  
 REP: McDonnell/Myers  
 DIRT Bruce Howard  
 ENHANCES  
 NO IMPACT  
 MINOR IMPACT  
 MAJOR IMPACT

Construction	Pollution	Drilling Production	Transport Operations	Accidents	Others
Roads, bridges, airports Transmission lines, pipelines Dams & impoundments Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal Liquid effluent discharge Subsurface disposal Others (toxic gases, noxious gas, etc.)	Well drilling Fluid removal (Prod. wells, facilities) Secondary Recovery Noise or obstruction of scenic views Mineral processing (ext. facilities) Others	Trucks Pipelines Others	Spills and leaks Operational failure	

Forestry									
Grazing	/	/	/	/	/	/	/	/	/
Wilderness									
Agriculture <u>Potential</u>									
Residential-Commercial	/	/	/	/	/	/	/	/	/
Mineral Extraction									
Recreation	/	/	/	/	/	/	/	/	/
Scenic Views	/	/	/	/	/	/	/	/	/
Parks, Reserves, Monuments									
Historical Sites	NONE KNOWN								
Unique Physical Features									
Birds	/	/	/	/	/	/	/	/	/
Land Animals	/	/	/	/	/	/	/	/	/
Fish									
Endangered Species	NONE KNOWN								
Trees, Grass, Etc.	/	/	/	/	/	/	/	/	/
Surface Water	NO LIVE STREAMS								
Underground Water	/	/	/	/	/	/	/	/	/
Air Quality	/	/	/	/	/	/	/	/	/
Erosion	/	/	/	/	/	/	/	/	/
Other									
Effect On Local Economy	/	0						/	/
Safety & Health	/	/	/	/	/	/	/	/	/
Others									

*Flow Oil and Gas*

LEASE U-4956 DATE Dec 9, 1977  
 WELL NO. Federal Unit #1  
 LOCATION: NE ¼ NE ¼, SEC. 29, T. 36S, R. 11W  
 FIELD Wildcat COUNTY IRON STATE Ut

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Cabot Corporation PROPOSES TO DRILL AN OIL AND  
 (COMPANY)  
 GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 5200 FT. TD. 2) TO CONSTRUCT A  
 DRILL PAD 126' FT. X 265 FT. AND A RESERVE PIT 60 FT. X 100 FT.  
 3) TO CONSTRUCT ~~300'~~<sup>14'</sup> FT. WIDE X 0.05 MILES ACCESS ROAD AND UPGRADE  
 FT. WIDE X / MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD. TO CONSTRUCT  
 GAS  OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD  
 AND  TRUCK  TRANSPORT THE PRODUCTION THROUGH A PIPELINE TO A TIE-IN IN  
 SECTION , T. , R.

2. LOCATION AND NATURAL SETTING (EXISTING ENVIRONMENTAL SITUATION).

(1) TOPOGRAPHY:  ROLLING HILLS  DISSECTED TOPOGRAPHY  DESERT  
 OR PLAINS  STEEP CANYON SIDES  NARROW CANYON FLOORS  DEEP DRAINAGE  
 IN AREA  SURFACE WATER rounded hills cut with small washes &  
Drainage patterns. Well is near saddle point between  
two hills of approx 6000± elevation. Approx 8500' from  
cedar city boundary.

(2) VEGETATION:  SAGEBRUSH  PINION-JUNIPER  PINE/FIR  FARMLAND  
 (CULTIVATED)  NATIVE GRASSES  OTHER primary cover is grasses/sagebrush  
native type vegetation. AREA is spotted with juniper type trees.  
clearing drill pad will have minor effect on vegetation of AREA.

(3) WILDLIFE:  DEER  ANTELOPE  ELK  BEAR  SMALL  
MAMMAL  BIRDS  <sup>NONE KNOWN</sup> ENDANGERED SPECIES  OTHER Due to proximity  
to Cedar City wild game is sparse.

(4) LAND USE:  RECREATION  LIVESTOCK GRAZING  AGRICULTURE  
 MINING  INDUSTRIAL  RESIDENTIAL  OIL & GAS OPERATIONS

State has applied for lease for building schools & ect  
NO construction has began AS O&G lease is prior to  
states lease.

REF: BLM UMBRELLA EAR  
USFS EAR  
OTHER ENVIRONMENTAL ANALYSIS

3. Effects on Environment by Proposed Action (potential impact)

1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6) Losses of circulation could continue upper geologic zones.  
These zones according to McDonald will probably be basal and above  
water table. ~~Some~~ Plans have been made to anticipate these  
zones drill with water (fish) and weight material & loss circulation material on  
hand at all times.

#3 cont.

7. Well is inline with Airstrip approx 5 miles ~~North~~ to the North, and 2 miles SSW of AIR BEACON. It was agreed at onsite that potential hazard would be minimal as standard pattern for Strip is to Land from South or <sup>Left hand</sup> right hand approaches. Drill rig tower would be below or near elevation of nearby hills.

8. IF well is producer, Land use (future) may be effected in ~~future~~ over the life of the well. The proximity of the unit to Cedar City would mean that development of the ~~field~~ field would have effects on city growth patterns and economy of area.

The drilling of the unit well would probably answer the question of what the potential of area is. The unit extends north toward city and adjacent areas to unit planned for residential construction & development.

The drilling of this well would have very little effect on any of these projects ~~as~~ even if it is producer however, development of the unit would effect the area to large extent.

I recommend that this well be used as a test well for unit to help evaluate the unit. Any other future wells or development unit be considered basis for UNUSAL EIA. IF well is a producer, plans should be made to evaluate the area ASAP in a detailed manner to see if action require environmental statement.

9) The closeness of Cedar City will probably bring a share of spectators - Reserve pit should be fenced on three sides during drilling - IF driller see's the need for warning signs - (NO TRESPASS, ect on drill pad, I recommend we concern for safety reasons.)

4. Alternatives to the Proposed Action

1) NOT APPROVING THE PROPOSED PERMIT -- THE OIL AND GAS LEASE GRANTS THE LESSEE EXCLUSIVE RIGHT TO DRILL FOR, MINE, EXTRACT, REMOVE AND DISPOSE OF ALL OIL AND GAS DEPOSITS.

2) DENY THE PROPOSED PERMIT AND SUGGEST AN ALTERNATE LOCATION TO MINIMIZE ENVIRONMENTAL IMPACTS. NO ALTERNATE LOCATION ON THIS LEASE WOULD JUSTIFY THIS ACTION.

3) LOCATION WAS MOVED \_\_\_\_\_ TO AVOID \_\_\_\_\_  
 LARGE SIDEHILL CUTS     NATURAL DRAINAGE     OTHER \_\_\_\_\_

4) Disturbed areas will be approx 220' x 340' ±.

5. Adverse Environmental Effects Which Cannot Be Avoided

1) MINOR AIR POLLUTION DUE TO EXHAUST EMISSIONS FROM RIG ENGINES AND SUPPORT TRAFFIC ENGINES.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6) \_\_\_\_\_

6. DETERMINATION:

(THIS REQUESTED ACTION ~~DOES~~ DOES NOT CONSTITUTE A MAJOR FEDERAL ACTION SIGNIFICANTLY AFFECTING THE ENVIRONMENT IN THE SENSE OF NEPA, SECTION 102(2) (C).

DATE INSPECTED Dec 9, 1977

INSPECTOR EVANS

W.P. Martin

U. S. GEOLOGICAL SURVEY  
CONSERVATION DIVISION - OIL & GAS OPERATIONS  
SALT LAKE CITY DISTRICT

DEC 13 1977

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE: U-4956

Well No.: CABOT CORPORATION  
FEDERAL UNIT #1

Location: 660' FNL, 660' FEL

Sec. 29, T. 36 S., R. 11 W., SLM  
IRON COUNTY, UTAH

1. Stratigraphy & predicted hydrocarbon zones: Proposed TD of 5,200 feet; hole will be collared in TERTIARY BASALTS and test the KAIBAB LIMESTONE, TOROWEAP FM., AND QUEANTOWEAP SS.  
Estimated tops: CHINLE 660'  
MOENKOPI 1000'  
TIMPOWEAP 4200'  
KAIBAB 4300'  
TOROWEAP 4600'  
QUEANTOWEAP 5000'
2. Fresh water aquifers: MAY BE PRESENT TO DEPTHS OF 400-500 FEET.
3. Other mineral bearing units: NONE
4. Possible lost circulation zones: UNKNOWN
5. Other zones that may need special mud, casing, or cementing programs:  
UNKNOWN
6. Competency of rock at proposed casing intervals: Probably adequate for the APD casing program.
7. Possible abnormal pressure-temperature zones: Only T,P's that are normal or that are subnormal to the  $\frac{1}{g,1}$  T,P conditions at the depths involved, are considered likely.
8. Additional logging or sampling needed: APD logging program should be adequate to define and evaluate the leasable minerals likely to be penetrated.
9. References & remarks: USGS Files, Salt Lake City, Utah.

Signed:

RW Jones

Date:

12/21/77

Steve Oil and Gas

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

\*\* FILE NOTATIONS \*\*

Date: Dec. 8-

Operator: Cabot Corporation

Well No: Cedar City Unit #1

Location: Sec. 29 T. 36 S R. 11 W County: Iron

File Prepared:   
Card Indexed:

Entered on N.I.D.:   
Completion Sheet:

API NUMBER: 43-021-30004

CHECKED BY:

Administrative Assistant [Signature]

Remarks: No objection to trenching

Petroleum Engineer [Signature]

Remarks:  
Director 7

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No.

Surface Casing Change to

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site

O.K. Rule C-3

O.K. In  Unit

Other:

Letter Written/Approved

December 14, 1977

*Cabot Corporation  
c/o Robert McDonald  
214 Granite Building  
1228 15th Street  
Denver, Colorado 80202*

*Re: Well No. Cedar City Unit No. 1  
Sec. 29, T. 36 S, R. 11 W,  
Iron County, Utah*

*Gentlemen:*

*Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.*

*It would be appreciated if a copy (unexecuted would suffice) of the proposed "Cedar City Unit Agreement" were forwarded to this Division at your earliest convenience.*

*Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:*

*PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771*

*Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.*

*Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.*

*The API number assigned to this well is 43-021-20003.*

*Very truly yours,*

*CLEON B. FREIGHT  
Director*

*cc: U.S. Geological Survey*

RECEIVED  
JAN 10 1978

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF OIL  
MINING  
GEOLOGICAL SURVEY

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

Form approved.  
Budget Bureau No. 42-R1423.

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  
Cabot Corporation

3. ADDRESS OF OPERATOR  
1228 15th Street  
c/o Robert McDonald, 214 Granite Bldg., Denver, Col. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 660' FNL & 660' FEL (NE $\frac{1}{4}$  NE $\frac{1}{4}$ )  
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.  
U-4956

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
No

7. UNIT AGREEMENT NAME  
Cedar City

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
Unit #1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR B.LK. AND SURVEY OR AREA  
sec. 29, T. 36 S., R. 11 W., SLM

12. COUNTY OR PARISH  
Iron

13. STATE  
Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
2 $\frac{1}{2}$  miles southwest of Cedar City (about 3 $\frac{1}{2}$  miles by road)

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
660'

16. NO. OF ACRES IN LEASE  
1430

17. NO. OF ACRES ASSIGNED TO THIS WELL  
80

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
None

19. PROPOSED DEPTH  
5200 feet

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5932 natural ground

22. APPROX. DATE WORK WILL START\*  
January 25, 1978

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	11 3/4"	42#	500'	To Surface
8 3/4"	5 1/2"	14#	Through oil/gas zones.	500 sx or more if needed (more than one prod. zone, or badly washed hole.)

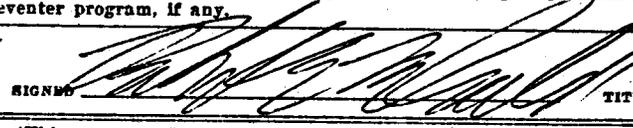
It is proposed to drill this development well to a depth of 5200 feet to test the Queantowep Sandstone (Pennsylvanian).

Attached: Form 9-331 with Drilling Program  
Surveyors Plat  
Well control Requirements  
Multi-point Surface Use Plan w/ attachments.

3-USGS  
1-State of Utah  
2-Cabot Houston  
1-Cabot Pampa

~~NOTICE OF APPROVAL~~

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.   
SIGNATURE \_\_\_\_\_ TITLE Agent DATE 11/30/77

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY (ORIG. SGD.) E. W. GYNN TITLE DISTRICT ENGINEER DATE JAN 06 1978

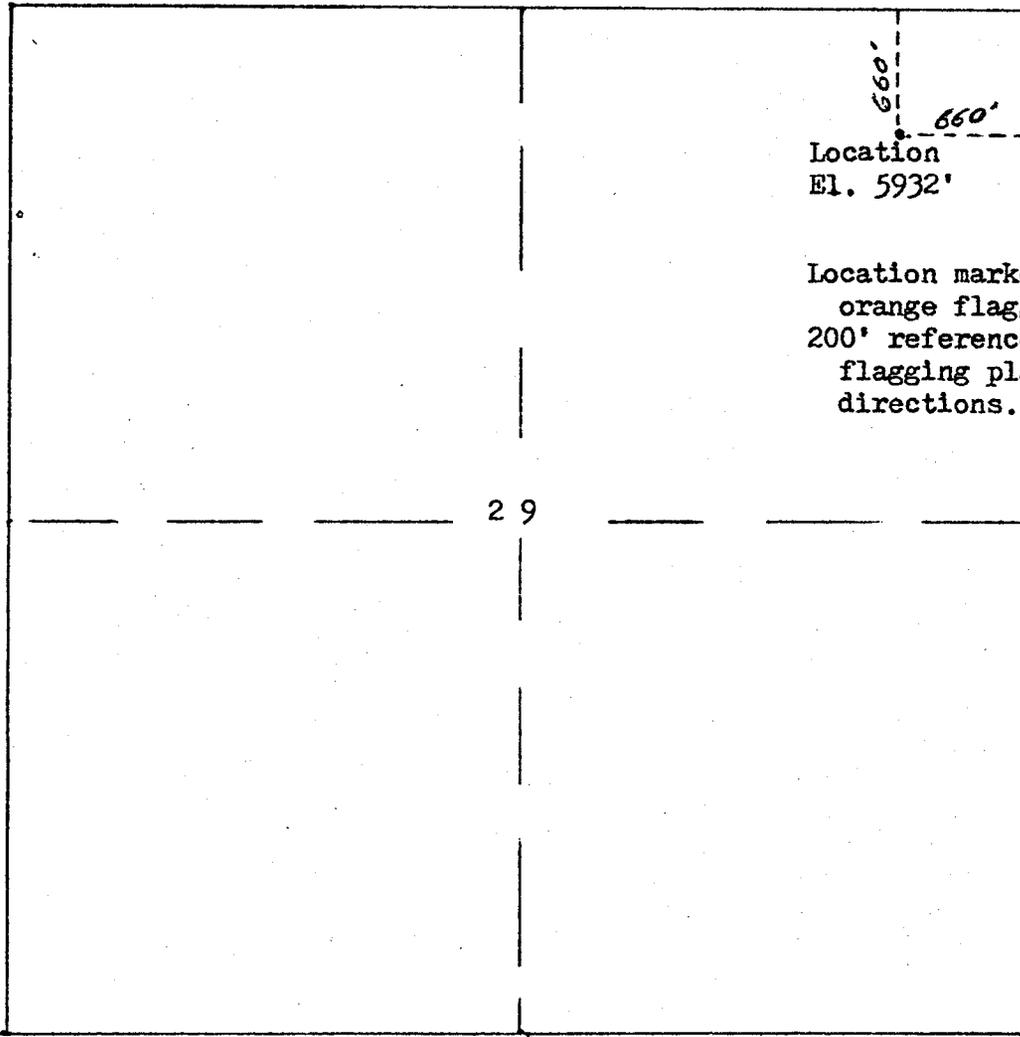
CONDITIONS OF APPROVAL, IF ANY:

CABOT CORPORATION  
Cedar City Unit #1

660 feet from/ north line, 660 feet from/ east line  
section 29, T. 36 S., R. 11 W., Salt Lake P. M.

Staked By

BULLOCH BROS. ENGINEERING, INC.  
Registered Engineers and Land Surveyors



62 North 300 East,  
Cedar City, Utah 84720  
Phone: (801) 586-9592

March 7, 1978

MEMO TO FILE:

Re: Cabot Corporation  
Well No. Cedar City #1  
NE NE Sec. 29, T. 36S., R. 11W.  
Iron County, Utah

On March 7, 1978, Cabot Corporation requested permission to plug and abandon the above well. The pertinent data is as follows:

TOTAL DEPTH:		5,740'
Surface Casing	9 5/8" @	524'

PERTINENT TOPS:		
Timoweap		4,776'
Kaibab		4,969'
Toroweap		5,223'

PLUGS:		
#1	5,200 -	5,100'
#2	4,750 -	4,650'
#3	2,900 -	3,050'
#4	530 -	455'
#5	20 -	Surface

A regulation dry-hole marker will be set.



PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER

August 4, 1978

Cabot Corporation  
PO Box 1101  
Pampa, Texas 79065

Re: Well No. Dedar City #1  
Sec. 29, T. 36S, R. 11W  
Iron County, Utah  
December 1977-June 1978

Gentlement

Our records indicate that you have not filed a Monthly Report of Operations for the months indicated above on the subject well.

Rule C-22, ~~General Rules and Regulations~~ ~~and Practice~~ of Practice and Procedure, requires that said reports be filed on or before the ~~sixteenth~~ (16) day of the succeeding month. This report may be filed on Form OGC-1b, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, & MINING

Tammy Edge  
Typist



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

May 25, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
Chairman

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
CONSTANCE K. LUNDBERG  
EDWARD T. BECK  
E. STEELE McINTYRE

Cabot Corporation  
P. O. Box 1101  
Pampa, Texas 79065

Re: Well No. Cedar City Unit #1  
Sec. 29, T. 36S, R. 11W,  
Iron County, Utah  
WELL COMPLETION REPORT DUE

WELL NO. Jessies Twist Federal 1-9  
Sec. 9, T. 23S, R. 14E,  
Emery County, Utah  
June 1978 thru' March 1979  
SECOND REQUEST

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the months indicated above on the subject wells.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1b, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

*Kathy Avila*

KATHY AVILA  
RECORDS CLERK

cc: U.S.G.S.-SLC, UTAH

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICA  
(Other instructions on  
verse side)

Form approved.  
Budget Bureau No. 42-B1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Dry Hole</u>		5. LEASE DESIGNATION AND SERIAL NO. <u>W-4956</u>
2. NAME OF OPERATOR <u>Cabot Corporation</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <u>No</u>
3. ADDRESS OF OPERATOR <u>P. O. Box 1101, Pampa, Texas 79065</u>		7. UNIT AGREEMENT NAME <u>Cedar City</u>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  <u>660' FNL &amp; 660' FEL (NE1/4 NE1/4)</u>		8. FARM OR LEASE NAME <u>Federal</u>
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>5932' GR</u>	9. WELL NO. <u>Unit 1</u>
		10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u>
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Sec. 29, T-36 S., R 11 W. SLM</u>
		12. COUNTY OR PARISH <u>Iron</u> 13. STATE <u>Utah</u>

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

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

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

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

Permission was granted from U.S.G.S. to Plug and Abandon well while rig was still on hole. 11 3/4" surface casing was set at 525' KMB, cemented w/420 sks. Class G, cement was circulated to surface. It was plugged in the following manner:

5200' - 5100' - Cement Plug 31 sks. 50/50 Pozmix  
 5100' - 4750' - 9.0# mud  
 4750' - 4650' - Cement plug 39 sks. 50/50 Pozmix  
 4650' - 3050' - 9.0# mud  
 3050' - 2900' - Cement plug 58 sks. 50/50 Pozmix  
 2900' - 530' - 9.0# mud  
 530' - 455' - Cement Plug 45 sks 50/50 Pozmix  
 455' - 15' - 9.0# mud  
 15' - 0' - Cement Plug ?

Set 10' Dry Hole marker with legal description permanently placed on marker, top of marker 4' above ground level.

The surface location has been leveled and the surface restoration, reseeding, etc. was completed October 4, 1978 and the location is ready for inspection.

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

SIGNED [Signature] TITLE Agent DATE October 5, 1979

(This space for Federal or State office use)

APPROVED BY [Signature] TITLE ACTING DISTRICT ENGINEER DATE NOV 5 1979

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

*OPERATOR*



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

CLEON B. FEIGHT  
*Director*

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771  
November 15, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
*Chairman*

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
CONSTANCE K. LUNDBERG  
EDWARD T. BECK  
E. STEELE McINTYRE

Cabot Corporation  
P. O. Box 1101  
Pampa, Texas  
79065

RE: Well No. Cedar City Unit #1  
Sec. 29, T. 36S, R. 11W  
Iron County, Utah  
WELL COMPLETION REPORT DUE

Well No. Jessies Twist Federal 1-9  
Sec. 9, T. 23S, R. 14E,  
Emery County, Utah  
June 79 thur October 79.

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the months indicated above on the subject well(s).

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. Please note, a negative report is also required. This report may be filed on Form OGC-1b, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

*Debbie Beauregard*  
DEBBIE BEAUREGARD  
CLERK-TYPIST



**CABOT CORPORATION**

P. O. BOX 1101, PAMPA, TEXAS 79065

*FA*  
*M*

CABLE ADDRESS " CABLAK " PAMPA  
PHONE 689 - 2581 ( AREA CODE 806 )

December 4, 1979

Ms. Debbie Beauregard  
State of Utah  
Department of Natural Resources  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

RE: Well No. Cedar City Unit #1  
Sec. 29, T-36-S, R-11-W  
Iron County, Utah

Well No. Jessie Twist Federal 1-9  
Sec. 9, T-23-S, R-14-E  
Emery County, Utah

Ms. Beauregard:

Enclosed are copies of U.S.G.S. Form 9-331 in triplicate for the above referenced wells.

Please note that the Cedar City Unit #1 has been approved by the U.S.G.S. while the Jessie Twist Federal 1-9 is currently being examined for approval.

Also, please find enclosed duplicate copies of the Well Completion Report for the Jessie Twist Federal 1-9.

Please accept our apologies in that we thought this matter had been taken care of.

Very truly yours,

Gerald B. Myers

GBM:cc

Enclosures - 8

**RECEIVED**

DEC 10 1979

DIVISION OF  
OIL, GAS & MINING

March 6, 1980

Cabot Corp.  
P.O. Box 1101  
Pampa, Texas 79065

Re: Well No. Cedar City Unit #1  
Sec. 29, T. 36S, R. 11W  
Iron County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

  
JANICE TABISH  
CLERK TYPIST

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

W-4956

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

No

7. UNIT AGREEMENT NAME

Cedar City

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Unit 1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 29, T-36 S., R 11 W.  
SLM

12. COUNTY OR PARISH

Iron

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

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

1.

OIL WELL  GAS WELL  OTHER  **Dry Hole**

2. NAME OF OPERATOR

Cabot Corporation

3. ADDRESS OF OPERATOR

P. O. Box 1101, Pampa, Texas 79065

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)

At surface

660' FNL & 660' FEL (NE1/4 NE1/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5932' GR

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(Other)

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

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

Permission was granted from U.S.G.S. to Plug and Abandon well while rig was still on hole. 11 3/4" surface casing was set at 525' KMB, cemented w/420 sks. Class G, cement was circulated to surface. It was plugged in the following manner:

- 5200' - 5100' - Cement Plug 31 sks. 50/50 Pozmix
- 5100' - 4750' - 9.0# mud
- 4750' - 4650' - Cement plug 39 sks. 50/50 Pozmix
- 4650' - 3050' - 9.0# mud
- 3050' - 2900' - Cement plug 58 sks. 50/50 Pozmix
- 2900' - 530' - 9.0# mud
- 530' - 455' - Cement Plug 45 sks 50/50 Pozmix
- 455' - 15' - 9.0# mud
- 15' - 0' - Cement Plug

**RECEIVED**  
MAY 7 1980

DIVISION OF  
OIL, GAS & MINING

Set 10' Dry Hole marker with legal description permanently placed on marker, top of marker 4' above ground level.

The surface location has been leveled and the surface restoration, reseeding, etc. was completed October 4, 1978 and the location is ready for inspection.

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

SIGNED Kay M. ...

TITLE Agent

DATE October 5, 1979

(This space for Federal or State office use)

APPROVED BY W.P. ...

TITLE ACTING DISTRICT ENGINEER

DATE NOV 5 1979

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

*File*

October 7, 1980

Cabot Corporation  
P.O. Box 1101  
Pampa, Texas 79065

RE: Well No. Cedar City Unit #1  
Sec. 29, T. 36S, R. 11W.,  
Iron County, Utah  
Second Notice

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING



BARBARA HILL  
CLERK TYPIST

/bjh

Enclosures: Forms



**CABOT CORPORATION**

P. O. BOX 5001, PAMPA, TEXAS 79065

CABLE ADDRESS " CABLAK " PAMPA  
PHONE 669 - 2581 ( AREA CODE 806 )

October 15, 1980

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Attention: Barbara Hill

Gentlemen:

Cedar City Unit #1  
Section 29-36S-11W  
Iron County, Utah

**RECEIVED**

OCT 20 1980

We have enclosed in duplicate Form OGCC-3 on the above subject well for your information and file, executed on behalf of Cabot Corporation. We apologize for this late filing.

DIVISION OF  
OIL, GAS & MINING

Very truly yours,

*Ray Wooldridge*  
Ray Wooldridge *lp*

LRW:lp

Enc.

SUBMIT IN DUPLICATE\*

STATE OF UTAH

(See other instructions on reverse side)

OIL & GAS CONSERVATION COMMISSION

W-4956

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

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

5. LEASE DESIGNATION AND SERIAL NO.

No

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

No

7. UNIT AGREEMENT NAME

Cedar City

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Unit #1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 29, T36S, R11W  
SLM

12. COUNTY OR PARISH  
Iron

13. STATE  
Utah

b. TYPE OF COMPLETION:  
NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other Plug & Abandon

2. NAME OF OPERATOR  
Cabot Corporation

3. ADDRESS OF OPERATOR  
P. O. Box 5001, Pampa, Texas 79065

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 660' FNL and 660' FEL NE NE  
At top prod. interval reported below  
At total depth Same

14. PERMIT NO. 43-021-30004 DATE ISSUED 1-6-78

15. DATE SPUDDED 1-29-78 16. DATE T.D. REACHED 3-6-78 17. DATE COMPL. (Ready to prod.) P&A 3-8-78 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5932' GR 19. ELEV. CASINGHEAD --

20. TOTAL DEPTH, MD & TVD 5740' 21. PLUG, BACK T.D., MD & TVD 4' 22. IF MULTIPLE COMPL., HOW MANY\* -- 23. INTERVALS DRILLED BY → ROTARY TOOLS 0-5740 CABLE TOOLS -0-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
None 25. WAS DIRECTIONAL SURVEY MADE  
Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DIL - BHC - HDT - FDC/CWL - GR 27. WAS WELL CORRED  
No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4	42	525 KBM	14-3/4	420 sx Class G Circulated	None

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)

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 Ray Woodridge TITLE \_\_\_\_\_ DATE 10-15-80

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

June 19, 1981

Cabot Corporation  
P. O. Box 5001  
Pampa, Texas 79065

Re: Well No. Federal Unit #1  
Sec. 29, T. 36S, R. 11W  
Iron County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office 10-15-80, from above referred to well indicates the following electric logs were run: DIL, BHC-HDT, FDC/CWL-GR. As of today's date this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS, AND MINING



Sandy Bates  
Clerk-Typist