

AZTEC OIL & GAS COMPANY

2000 FIRST NATIONAL BANK BUILDING
DALLAS, TEXAS 75202

November 17, 1967

LAND DEPARTMENT
KENNETH A. SWANSON, MANAGER

PMX-26
Nov Dec 10

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. A. L. Porter
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

11-20-67

Re: Application of Aztec Oil & Gas Company
for Authorization to Convert Additional
Producing Wells to Injection Wells and
Expansion of Project Area Pursuant to
Order No. R-2190, Tenneco Pressure Main-
tenance Project, Totah-Gallup Pool,
San Juan County, New Mexico

Dear Mr. Porter:

Pursuant to Rule 11 of Order R-2190, Aztec Oil & Gas Company hereby submits in triplicate its application for administrative approval for the conversion of additional producing wells to injection wells and the expansion of project area for the subject Pressure Maintenance Project.

In support of this application, Applicant respectfully states and shows the following:

1. Applicant has assumed the duties and obligations of operator of the subject Pressure Maintenance Project.
2. The project area is situated within the boundaries of the Central Totah Unit. Applicant proposes to convert the currently producing Central Totah Unit Wells Nos. 6, 14, 20 and 22 to injection wells. Injection of water in the Central Totah Unit has been into Wells Nos. 1, 3, 5, 9, 18 and 21, all approved by previous orders. Also approved by previous order, but not converted to injection wells, are the Central Totah Unit Wells Nos. 10 and 13 which are currently producing. The proposed conversion of the four additional wells will improve the injection pattern and efficiency as far as is permitted by present wells and

Mr. A. L. Porter
November 17, 1967
Page 2

will increase the water injection rate. Unit Wells Nos. 10 and 13 will be converted to injection wells as future operating conditions dictate. Attached hereto as Exhibit "A" is a plat showing the location of the proposed injection wells, all wells within the project area, and all offset operators and wells which offset the project area.

3. Attached hereto as Exhibit "B-1", "B-2", "B-3", and "B-4" are schematic drawings of the proposed injection wells describing the casing, tubing, perforated interval and depth for each well and showing that the proposed injections of water will be confined to the Gallup formation.
4. As shown on Exhibit "A", Applicant proposes an expansion of the project area to include Lots 1, 2, S/2 SE/4 and the SE/4 SW/4 of Section 11, Township 28 North, Range 13 West, San Juan County, New Mexico. These lands are within the boundary of the Central Totah Unit and the well situated thereon is directly affected by the subject Pressure Maintenance Project and is currently recovering unitized substances.
5. Applicant has this day forwarded a copy of this application by certified mail to the following operators offsetting the proposed injection wells: Roy L. Cook, Pan American Petroleum Corporation and Southwest Production Company.

Applicant respectfully requests the Secretary-Director to approve this application for the conversion of additional producing wells to injection wells and for the expansion of the subject project area of the subject Pressure Maintenance Project.

Respectfully submitted,

AZTEC OIL & GAS COMPANY

By: 
Gordon E. Coe

GEC:lg
Encls.

Mr. A. L. Porter
November 17, 1967
Page 3

cc: Mr. Carl Houy, Trustee in Bankruptcy
for Aspen Drilling Company, a Bankrupt
724 Patterson Building
Denver, Colorado 80202

Pioneer Producing Corporation
P. O. Box 2542
Amarillo, Texas

Mr. Warren Shear
P. O. Box 807
Duncan, Oklahoma

Pan American Petroleum Corporation
Security Life Building
Denver, Colorado 80202
Certified Mail, Return Receipt Requested

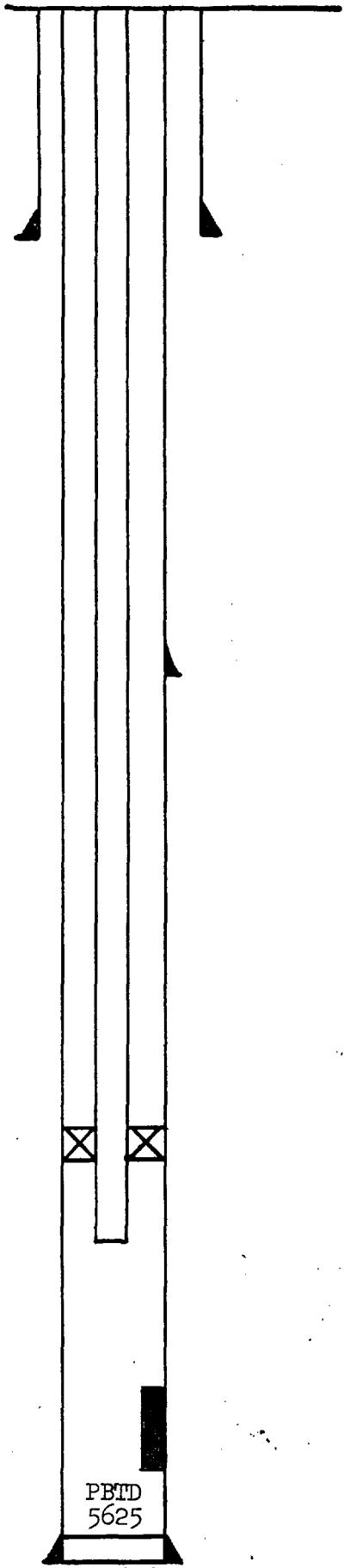
Roy L. Cook
1116 Bank of New Mexico Building
Albuquerque, New Mexico 87103
Certified Mail, Return Receipt Requested

Southwest Production Company
Southland Center
Dallas, Texas 75201
Certified Mail, Return Receipt Requested

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

EXHIBIT B-1

Aztec Oil & Gas Company
Central Totah Unit #6
Diagramatic Sketch of
Proposed Conversion to
Water Injection



8-5/8" casing set at 169'
Cemented w/125 sacks. Cement
circulated

4-1/2" stage collar at 1810
Cemented w/50 sacks
Top cement 1420 (calc.)

Baker Model A packer
Set at 5565
2-3/8" OD Tubing landed at 5565

Gallup Perforations
5592-98

4-1/2" OD casing set at 5652'
Cemented w/190 sacks. Top Cement 4230 (calc.)

PBTD
5625

TD 5656



FILE NO.

Aztec Oil & Gas Company
Central Totah Unit #6
Formerly Tenneco #15 Callov

2.
5

Field
Print

FIELD TOTAL Gallup

COUNTY SAN JUAN STATE New Mexi

LOCATION: 2310' FNL 4560 FEL

Other Serv
GRAI

SEC 28 TWP 29N RGE 13W

Permanent Datum

Ground Level Elev. 5740

Elevation:
KB 575
DF 574
GL 574

Log Measured from KB 11 F. Above Permanent Datum
Drilling Measured from KB of 11 Feet Above GL

Date 11-29-60

Run No.

Depth—Driller 5650

Depth—Logger 5653

Bottom Logged Interval 1910

Top Logged Interval 338' @ 169

Casing—Driller

Casing—logger

Bit Size 7 7/8"

Type Fluid in Hole Oil Emulsion

Density and Viscosity 4.7 55

pH and Fluid Loss 8.4 8 cc

Source of Sample Flow line

Rm @ Meas. Temp. 3.0 @ 80 °F

Rmf @ Meas. Temp. 3.2 @ 80 °F

Rmc @ Meas. Temp. 3.5 @ 80 °F

Source of Rmf and Rmc Measured

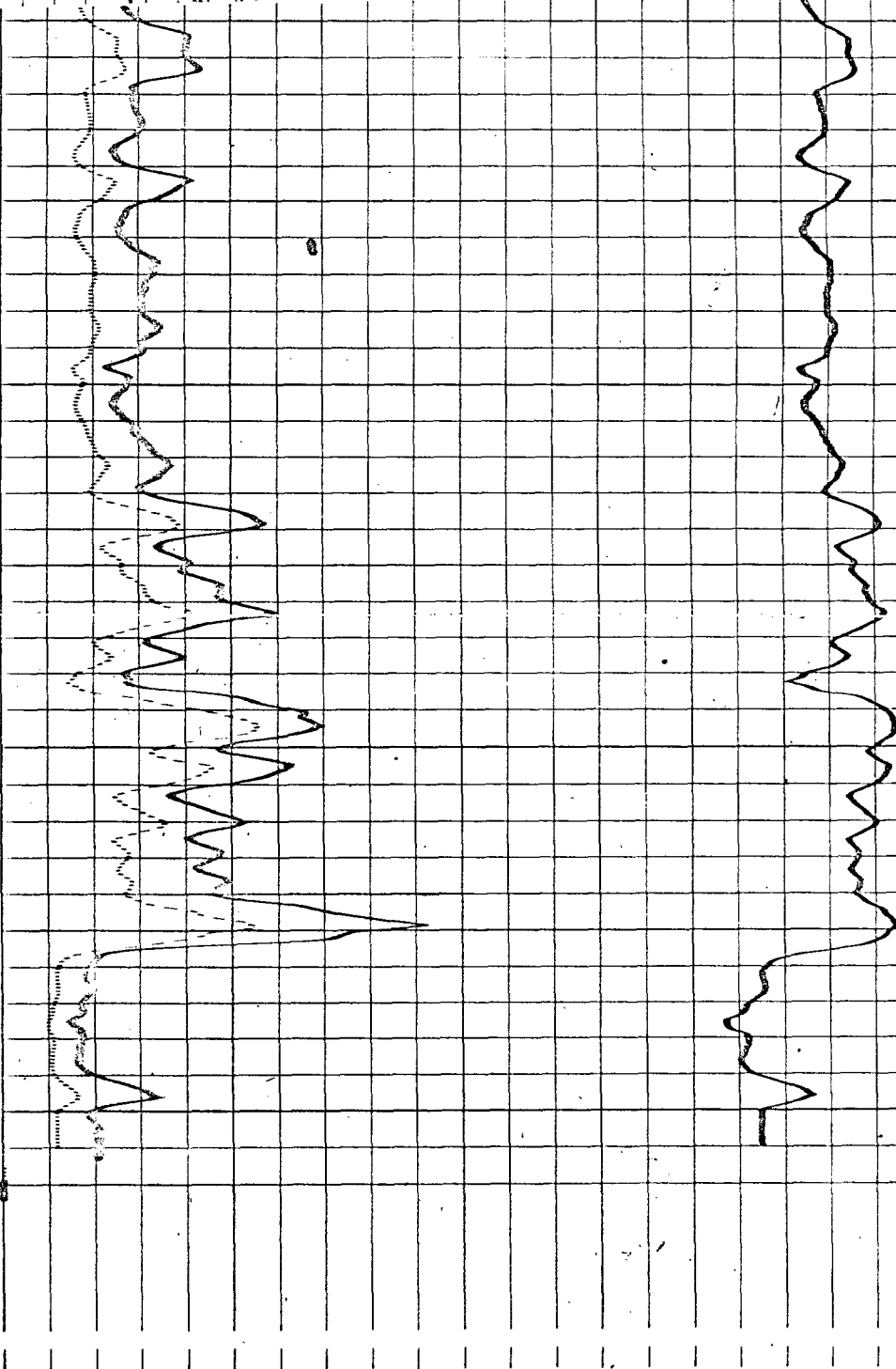
Rm @ BHT 1.7 @ 136 °F

Time Since Circ. 4 1/2

Max. Rec. Temp. Deg. F. 136 °F

Equip. No. and location 44701 Farm

Recorded By Wright

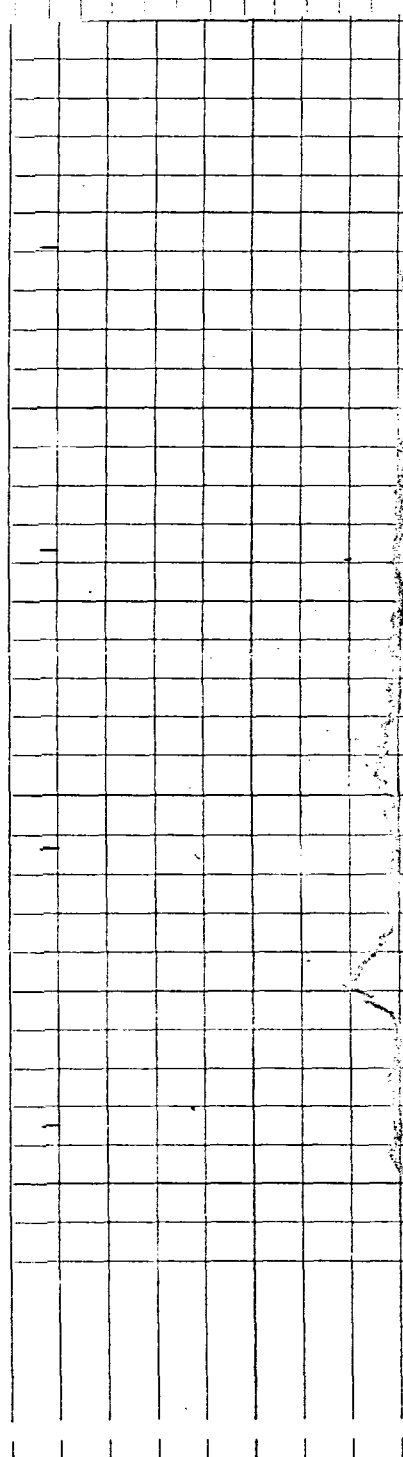
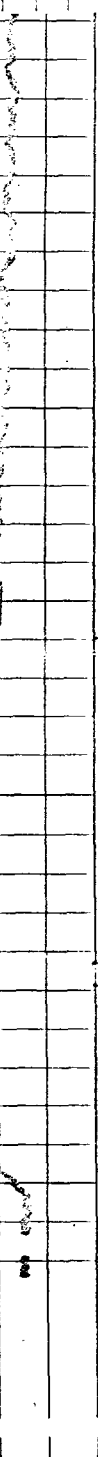


5400

5500

5600

Perf.
5592-98



RUN No. Date First Reading Last Reading Feet Measured Csg. Schlum. Csg. Driller Depth Reached Bottom Driller Depth Datum Mud Nat. Dens. Visc. Mud Resist. Res. BHT Rmf Rmc PH Wtr. Loss Bit Size Spcgs. AM AM AO AUD. SOURCE Truck No. Recorded By Witness	COUNTY	SAN JUAN, N.M.
	FIELD or	
	LOCATION	TOTAH GALLUP
	WELL	USA GLEN H. GALLOW #20
	COMPANY	TENNECO OIL COMPANY

EXHIBIT B-2

Aztec Oil & Gas Company
 Central Totah Unit #14
 Proposed Conversion to
 Water Injection

8-5/8" OD casing set at
 137'. Cemented w/100 sacks
 Cement circulated.

4-1/2" OD stage collar at 1786'
 Cemented w/50 sacks. Top cement
 1130 (Calc.)

Baker Model A packer set at 5570
 2-3/8" OD Tubing landed at 5570

Gallup Perforations
 5593-97, 5634-38

4-1/2" OD casing set at 5744
 Cemented w/80 sacks. Top cement 4890 (Calc.)

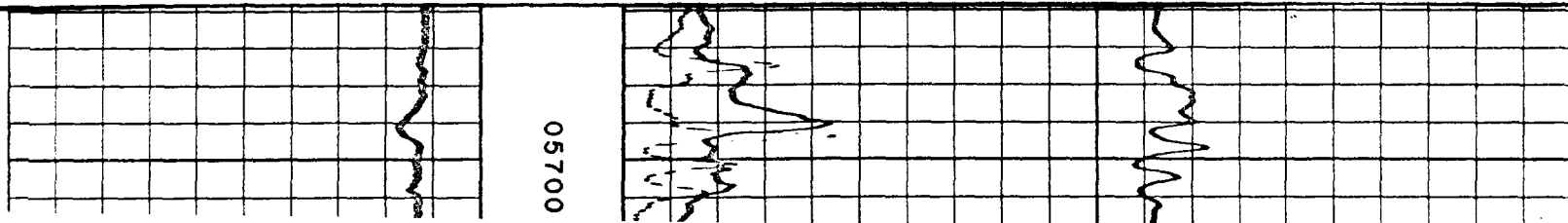
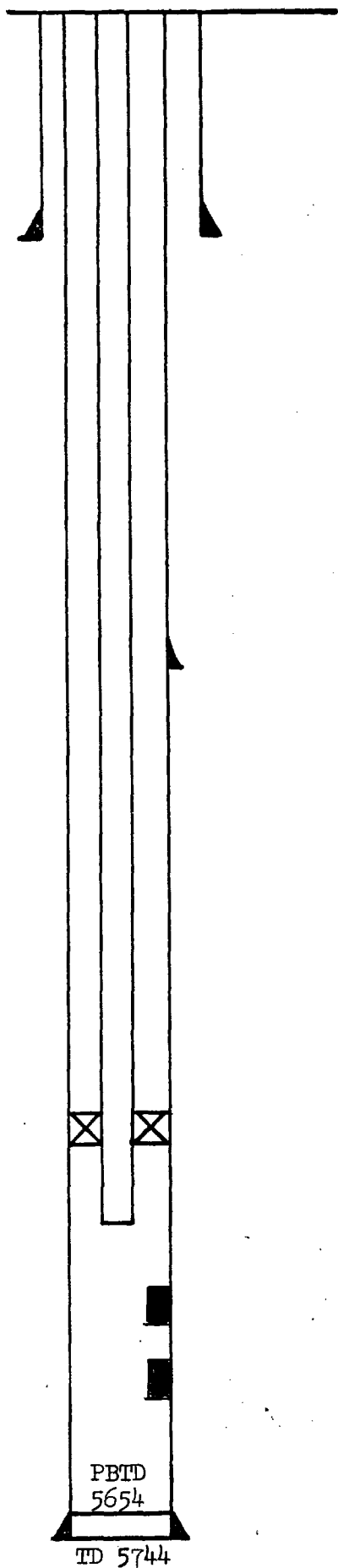
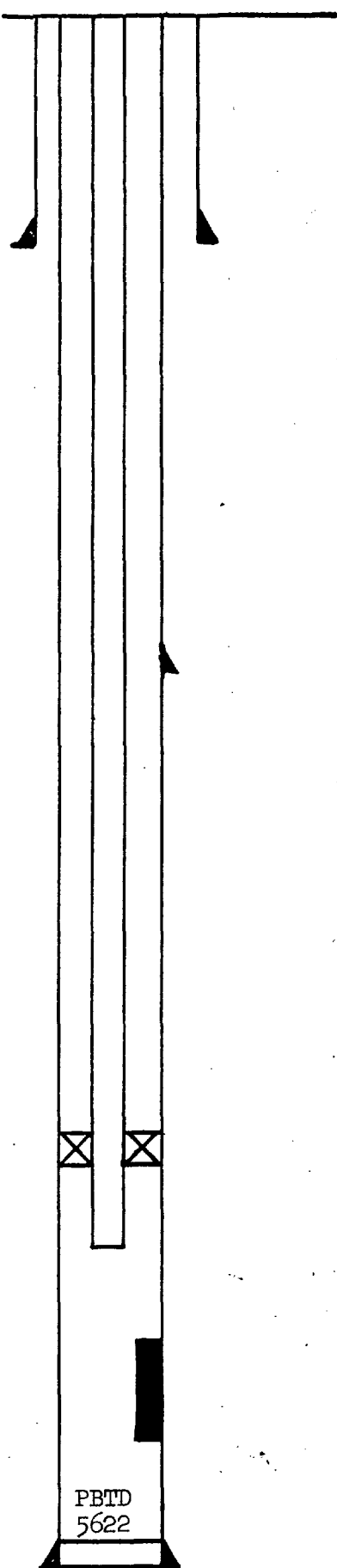


EXHIBIT B -3

Aztec Oil & Gas Company
Central Totah Unit #20
Diagrammatic Sketch of
Proposed Conversion to
Water Injection



8-5/8" OD casing set at 320'
Cemented w/225 sacks.
Cement circulated.

4-1/2" OD stage collar at 1789'
Cemented w/150 sacks
Top cement 1350 (Temp)

Baker Model A packer set at 5540
2-3/8" tubing landed at 5540

Gallup perforations:
5570-96

4-1/2" OD casing set at 5652
Cemented w/250 sacks. Top cement 4800 (Temp)

PBTD
5622

TD 5655



Other Surveys	ML
Location of Well	1580' FR S/L 1910' FR E/L SEC. 34-29N-13W R11LE'
Elevation: D.F.:	
K.B.: 5771'	
or G.L.: 5760'	
FILING No.	

ML

1580' FR S/L
1910' FR E/L
SEC. 34-29N-13W
FILLIE'

Elevation: D.F.: _____
K.B.: 5771'
or G.L.: 5760'

FILING No.

0

5400

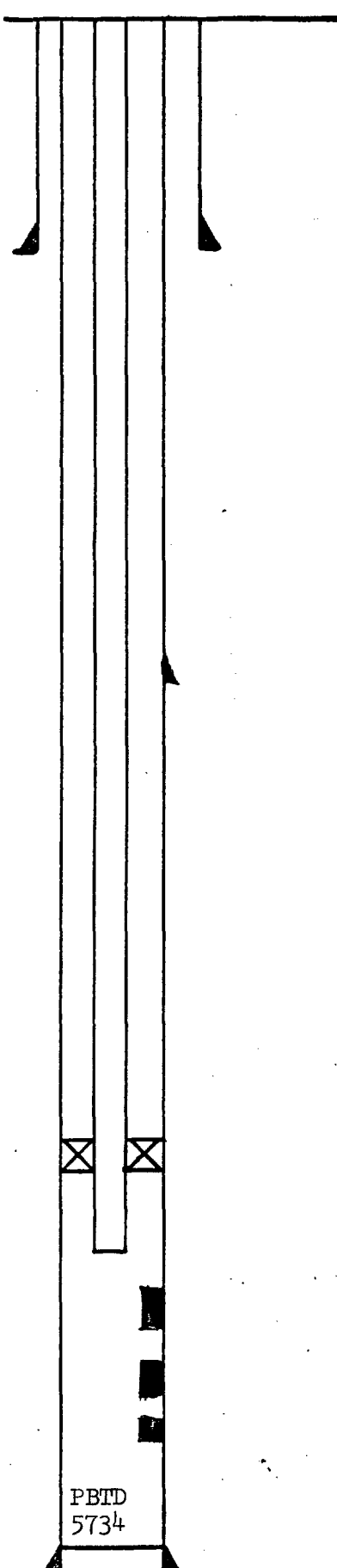
5500

5600

Perf 5570-96

EXHIBIT B -4

Aztec Oil & Gas Company
Central Totah Unit #22
Diagrammatic Sketch of
Proposed Conversion to
Water Injection



8-5/8" casing set at 234'
Cemented w/175 sacks. Cement
circulated.

4-1/2" stage collar at 1817
Cemented w/150 sacks
Top cement 1350 (Temp.)

Baker Model A packer set at 5587
2-3/8" OD Tubing landed at 5587

Gallup perforations:
5622-38, 5654-68
5710-14

PBTD
5734

4-1/2" OD casing set at 5744'
Cemented w/400 sxs. Top cement 3990 (Calc.)

TD 5745

11-15-61
ELECTRIC LOG

COMPANY AZTEC OIL & GAS COMPANY		COMPANY	
WELL HAGOOD # 15-G		FIELD TOTALH-GALLUP	
COUNTY SAN JUAN		STATE NEW MEXICO	
LOCATION 510' FSL 2035' FEL SEC. 34 TWP. 29-N RGE. 13-W		Other logs CONTACT- CALIPER	
Sec. Twp. Rge.		Elevation	
Permanent Datum KELLY BUSHING		KB. 5890	
Log Measured From KELLY BUSHING		DF. 5889	
Drilling Measured From KELLY BUSHING		G. 5879	
Run No. 1	Date 1-28-61		
Total Depth Driller 5740	Total Depth Welex 5745		
Csg. Shoe Driller 237	Csg. Shoe Welex 238		
Survey Begins 5740	Survey Ends 238		
Csg. Size 8-5/8"	Bit Size 7-7/8"		
Mud Data - Type CHEMICAL, GEL, CAUSTIC			
Weight 9.4	Viscosity 90		
Ph. @ 15	Wtr. Loss cc/30 min. 1.5		
Res. @ Surface Temp. 1.95	Res. @ Max. Hole Temp. 2.1		
Rmf. 1.1	Rmc. 2.4		
Source Mud Sample CIRCULATED			
Recorded By COULTHARD			
Witnessed By MR. DONALDSON			
Logging Tool No. 10058			

