

OIL CONSERVATION COMMISSION
Albuquerque DISTRICT



OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE 9-14-79

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD XXX _____
Proposed WFX _____
Proposed PMX _____

D. S. NUTTER

@ CHANGE

Gentlemen:

I have examined the application dated 9-11-79

for the MERRION & DAYLESS Navajo H #13 15-13-29N-14W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

AR Kendrick

J. GREGORY MERRION
PETROLEUM ENGINEER
P. O. BOX 507
FARMINGTON, NEW MEXICO 87401

September 11, 1979

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
1000 Rio Brazos
Aztec, NM 87410

Gentlemen:

Enclosed please find our application for approval of salt water disposal into the subsurface reflecting a change of plans.

We propose to change the injection zone from the Gallup to the Cliffhouse Mesa Verde at 2490-2520 feet. Cement will be squeezed across this zone as instructed by the District Engineer.

If further information is required, please advise.

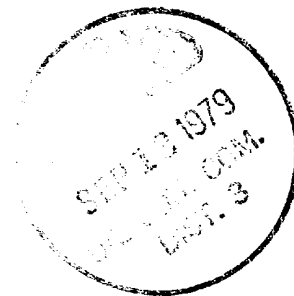
Yours truly,

MERRION & BAYLESS


STEVEN S. DUNN

SSD/pb

Enclosure



NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR J. Gregory Merrion and Robert L. Bayless		ADDRESS P.O. Box 507, Farmington, NM 87401	
WELL NAME Navajo H	WELL NO. 13	FIELD Totah Gallup	COUNTY San Juan
LOCATION UNIT LETTER K ; WELL IS LOCATED 1830 FEET FROM THE South LINE AND 1830 FEET FROM THE West LINE, SECTION 13 TOWNSHIP 29N RANGE 14W NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	8-5/8	204'	180	Surface	Circulated
INTERMEDIATE	none				
LONG STRING	4-1/2	5138	200	4140	Calculated
TUBING	2-3/8		NAME, MODEL AND DEPTH OF TUBING PACKER Baker model A Tension Packer		
NAME OF PROPOSED INJECTION FORMATION Cliffhouse			TOP OF FORMATION 2490	BOTTOM OF FORMATION 2520	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Plastic lined tubing		PERFORATIONS OR OPEN HOLE? Perforations	PROPOSED INTERVAL(S) OF INJECTION 2490-2520		
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Gallup Oil Production		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Gallup 4990-4997		

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Surface Alluvium - 100'	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA Pictured Cliffs - 1100'	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA Pt. Lookout - 3650'
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) MINIMUM 50 MAXIMUM 500	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? As required
APPROX. PRESSURE (PSI) less than 500		ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -- Yes
WATER TO BE DISPOSED OF Yes		NATURAL WATER IN DISPOSAL ZONE Yes
ARE WATER ANALYSES ATTACHED? No		

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)
Navajo Tribe, Window Rock, Arizona, ATTN: Minerals Supervisor

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL
J. Gregory Merrion and Robert L. Bayless are only operators within 1/2 mile of this injection well (see Location Map). Other information: Water to be injected is produced from the Pictured Cliffs and Mesa Verde Formations.

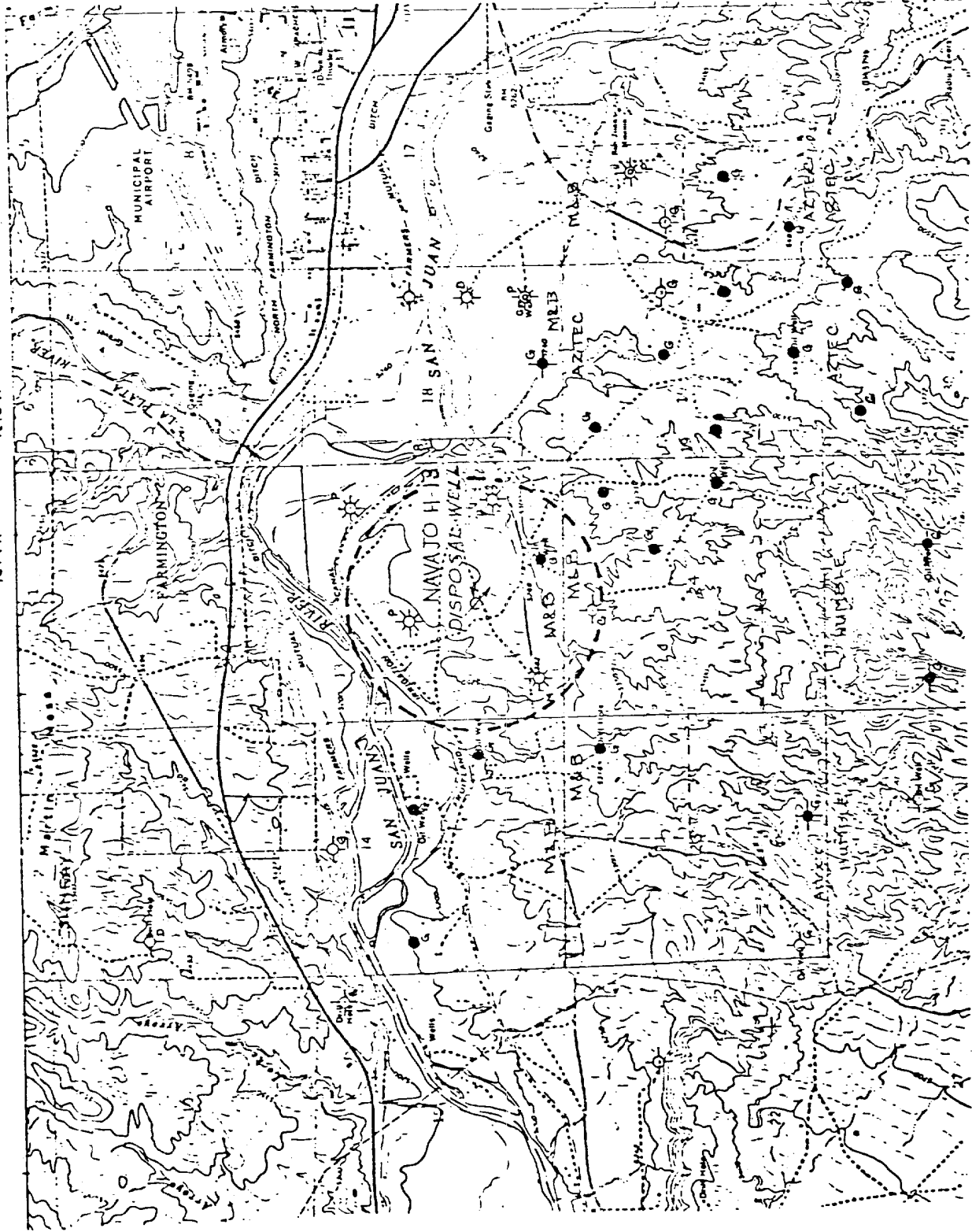
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER Yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Steven A. Allen (Signature) ENGINEER (Title) 9/12/79 (Date)





NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

R14W R13W



T 29 N

LEGEND

-  DRY HOLE OR ABANDNEY
-  GALLUP PRODUCER
-  PICTURE CLIFF PRODUCER
-  DAKOTA PRODUCER

MERRION & BAYLESS

1" = 1/2 MILE 9/27/78 BY: SSD

LOCATION MAP

PROPOSED SALT WATER

DISPOSAL WELL

SAN JUAN COUNTY

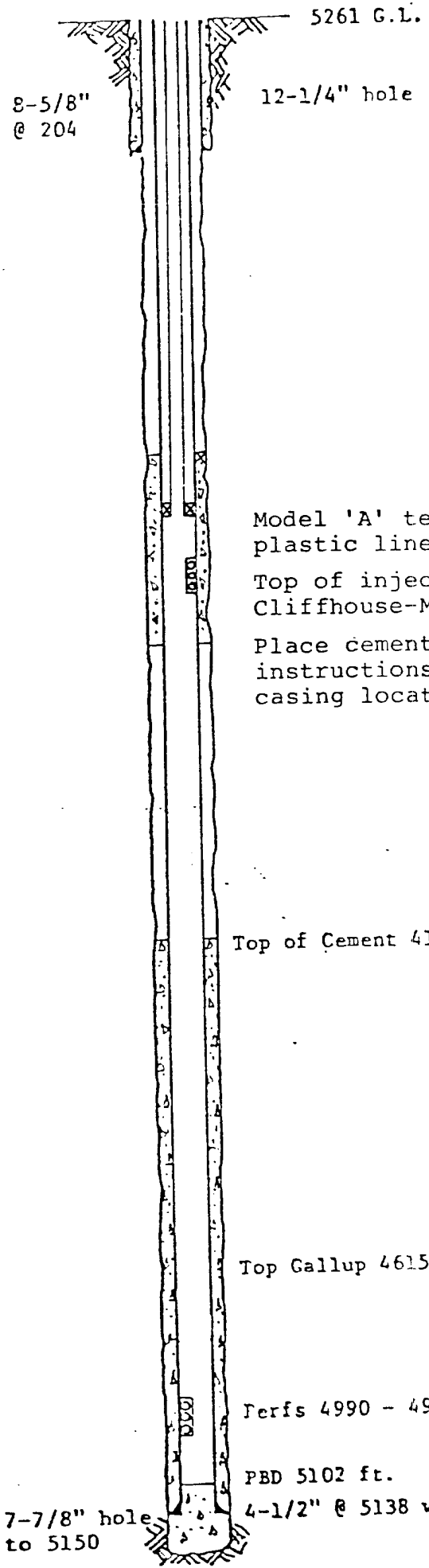
NAVAJO E-13
1830 FSL & 1830 FWL
Sec. 13, T19N, R14W
San Juan County

MERRION-BAYLESS

DATE none
NOV 9-27-78

Wellbore Diagram

Salt Water Disposal



Model 'A' tension packer @ 2480 w/ 2-3/8" plastic lined tubing

Top of injection zone 2490'
Cliffhouse-Mesa Verde 2490-2520'

Place cement across Cliffhouse and squeeze per instructions from District Engineer when hole in casing located.

Top of Cement 4140 ft. Calculated

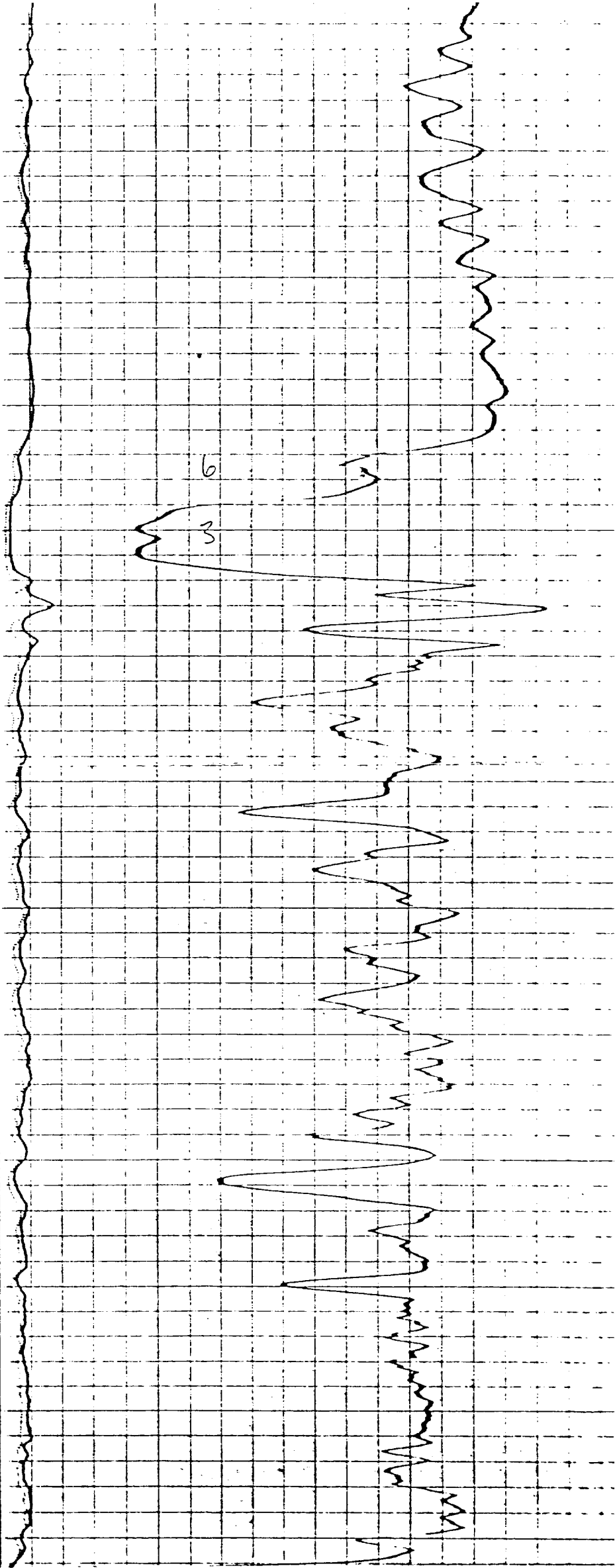
Top Gallup 4615 ft.

Perfs 4990 - 4997' Gallup

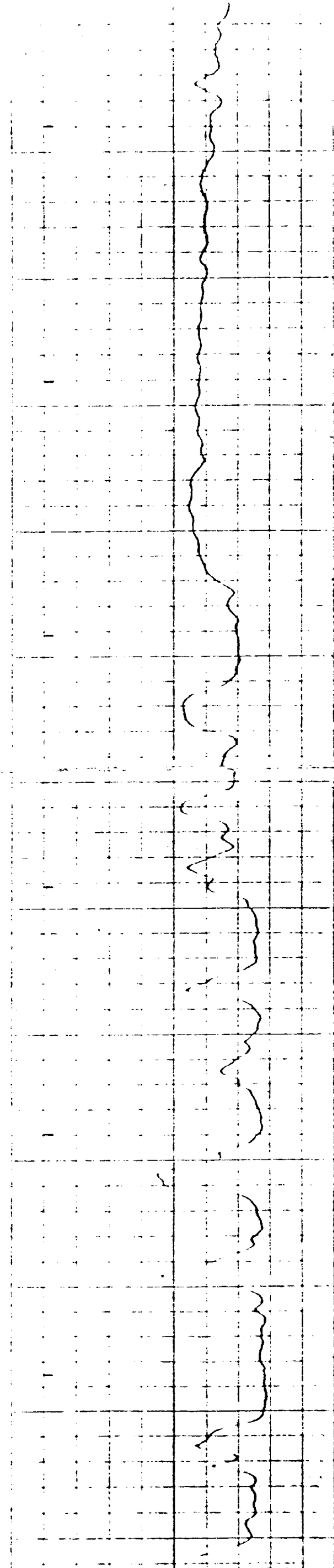
PBD 5102 ft.

7-7/8" hole to 5150
4-1/2" @ 5138 w/ 200 sx

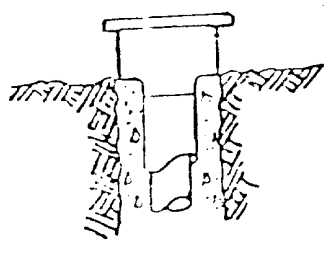
2300 2400 2500 2600 2700 2800 2900



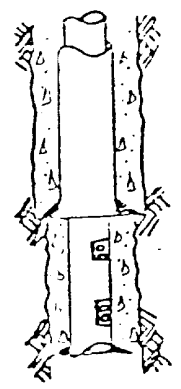
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NAVAJO II-4
510 FNL & 2130 FWL
Section 24, T29N, R14W
San Juan County

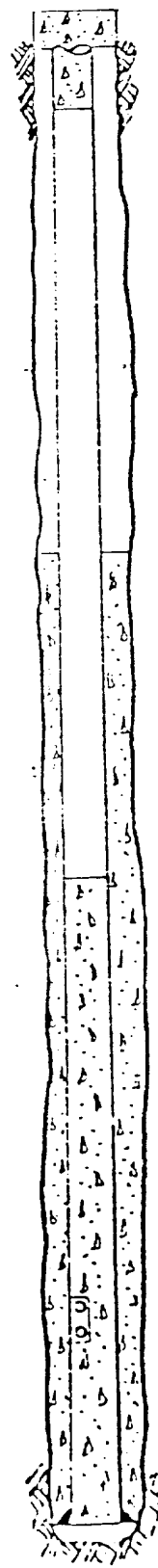


Elevation 5347' G.R.



8-5/8" @ 209' w/ 175 sx
Perfs 842-82
Perfs 982-92

Re-ran 4-1/2" casing @ 1119' KB w/250 sx



Cut 4-1/2" @ 1632 Spotted 30 sx
plug 1682-1582

Top of Cement 3817' calculated

Top of cement calculated 4810'

Top of Gallup 4681'

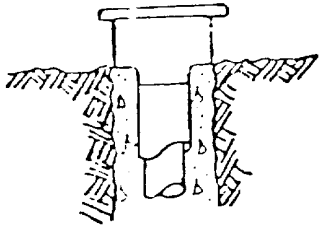
Old Perfs squeezed off 5048-5056'

4-1/2" @ 5156 ft.

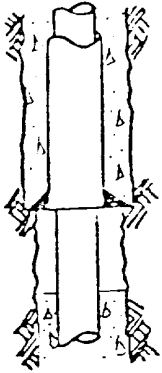
MERRION~BAYLESS

SCALE: None	APPROVED BY:	DRAWN BY: SSD
DATE: 9-27-78		REVISED
Wellbore Schematic		
Navajo II Lease		
DRAWING NUMBER		

NAVAJO II-5
705 FSL & 660 FWL
M-Sec. 13, T29N, R14W
San Juan County

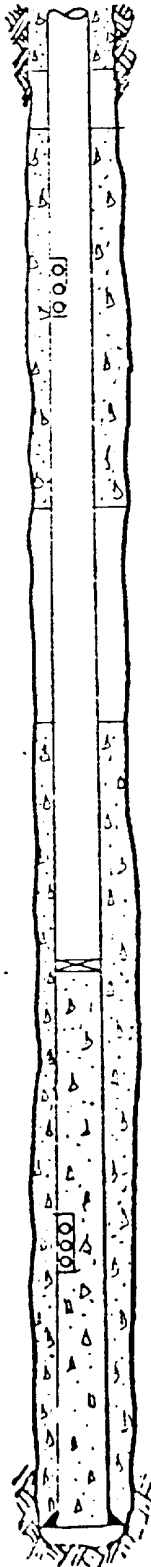


Elevation 5278 G.L.



8-5/8" @ 191 ft w/ 190 sx

Top cement @ 2400



Squeeze corrossion w/ 270 sx @ 2810'

Top cement @ 2872

Mesa Verde perms 3355-65'

Stage collar @ 3742 Cement w/ 250 sx

Top cement @ 4166

Retainer 4868 on plug back

Old Gallup perms 4979-86' squeezed w/ 50 sx

4-1/2" @ 5081' w/ 450 sx

MERRION~BAYLESS

SCALE: None

DATE: 9-27-78

APPROVED BY:

DRAWN BY SSD

REVISED

Wellbore Schematic

DRAWING NUMBER

Navajo H - 5