

# Pohlmann and Associates

FARMINGTON, NEW MEXICO AND HOUSTON, TEXAS

200 PETROLEUM PLAZA BLDG.  
FARMINGTON, NEW MEXICO 87401  
PHONE (505) 325-4608

July 3, 1979

TO: Oil Conservation Commission  
State of New Mexico  
P.O. Box 2088  
Santa Fe, NM 87501

FROM: Pohlmann & Associates for:  
John Staver  
Box 950  
Virginia, Minn. 55792

SUBJECT: Requested Additional Information to Allow John Staver  
to Dispose of Water in the Dakota-Table Mesa Field

The hearing concerning this matter took place on June 27th.

The main item that concerned the Commission (and us) was if the Dakota horizon in abandoned well No. 3-18 (1980 FNL, 1980 FWL - 3-27N-17W) was properly isolated. The original record we obtained and furnished was lacking.

In order to prove the Dakota is isolated, we reverted to the original Continental record. Please see attached diagram and copy of U.S.G.S. records. Note the Dakota is not only behind pipe, it is also cemented through a stage collar located 160' below the base of the zone of interest.

Other questions concerned production rates. The daily production rates follow:

Well NO.	BOPD	BWPD
5	8	91
20	7	81

Monthly estimate of total volume of water to be disposed is 4700 barrels.

July 3, 1979

Disposal well No. 22 has a defective packer. That packer is being replaced today. The annular space between the tubing and packer will be filled with water treated with a corrosion inhibitor. Disposal well No. 23 has checked out O.K. and the annular space in this well will also be filled with treated water. Both wells will have the casing valves open to atmosphere so annulus fluid can be checked.

We have also cleaned up the lease, repaired flow lines, repacked the triplex pump, repaired leaking well heads and most important of all - prepared and turned in all due notices to the U.S.G.S. and New Mexico Oil Conservation Commission.

  
Mark Pöhlmann

HP:wb

Enclosures:

cc: John Staver  
Box 950  
Virginia, Minn. 55792

Al Kendrick  
N.M. Oil Conservation Commission  
1000 Rio Brazos Rd.  
Aztec, NM 87410

CONTINENTAL 3-18  
1980 FNL 1930 FWL  
3-27N 17W  
ORIGINAL COMPLETION 5-10-61

19 3/8" @ 500'  
CMTD. TO SURFACE  
W/ 375 SKS.

17 1/4" HOLE TO 503'

TOP CEMENT 1063'

TOP DAKOTA 1387'

BASE DAKOTA 1552'

8 5/8" STAGE  
COLLAR @ 1712'  
W/ 150 SKS.

TOP CEMENT 4000'

8 5/8" @ 5000', 250 SKS.

11" HOLE TO 5000'

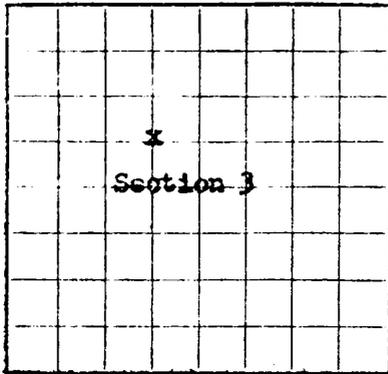
TOP CEMENT 6670'

5 1/2" @ 7113', 200 SKS.

7 3/4" HOLE TO 7113'

U. S. LAND OFFICE .....  
SERIAL NUMBER .....  
LEASE OR PERMIT TO PROSPECT .....

Navajo Tribe  
Lease No. 1-89-IND-57



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Continental Oil Company Address P. O. Box 3312, Durango, Colorado  
Lessor or Tract Navajo Field Table Mesa State New Mexico  
Well No. 18133 Sec. 3 T 27N R. 17W Meridian MPM County San Juan  
Location 1980 ft. S. of N. S. Line and 1980 ft. E. of W. Line of Sec. 3 Elevation 5360'  
(Elevation from relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon, so far as can be determined from all available records.

Signed November 29, 1961 Title District Superintendent

The summary on this page is for the condition of the well at above date.  
Commenced drilling March 27, 1961 Finished drilling May 10, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)  
No. 1 from 1391' to 1410' No. 4 from 7011' to 7011' (G)  
No. 2 from 6975' to 7011' (G) No. 5 from 7011' (G) to 7011' (G)  
No. 3 from 7082' to 7111' (G) No. 6 from 7111' (G) to 7111' (G)

IMPORTANT WATER SANDS

No. 1 from 4121' to 4800' No. 3 from 7011' (G) to 7011' (G)  
No. 2 from 7011' (G) to 7011' (G) No. 4 from 7011' (G) to 7011' (G)

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	To Perforated at		Purpose
							From -	To -	
13 3/8"	48#	8 RD	H-40	504'	king of mud				Surface
8 5/8"	32#	8 RD	J-55	5012'	Baker				Intermediate
5 1/2"	22#	8 RD	J-55	2971'	Baker				Production
5 1/2"	15.5#	8 RD	J-55	1618'	OR OK CV2 MERT				
5 1/2"	17#	8 RD	J-55	2495'			7097'	7113'	

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13 3/8"	503' RB	375	Displacement		
8 5/8"	5000' RB	400	Displacement		
5 1/2"	7113' RB	200	Displacement		

MARK

XPRA

DATE	TIME	DEPTH	TEMPERATURE	PRESSURE	WELL HEAD	WELL HEAD	WELL HEAD
12/27/61	10:00	5000	110	3.1			
12/28/61	8:00	5000					
12/29/61	8:00	5000					

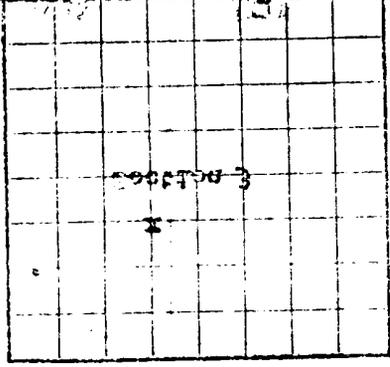
WEDDING AND CEMENTING RECORD

HISTORY OF OIL OR GAS WELL

16-43004-2 U.S. GOVERNMENT PRINTING OFFICE

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or balling.

Spudded 5-27-61. Drilled and reamed 17 1/4" hole to 503'. Ran 16 jts. of 13 3/8" 48# surface casing and set at 503'. Cemented to surface with 375 sacks regular. Drilled 11" hole with mud to 5000'. Ran IES log. Ran 121 jts. of 8 5/8" 32# J-55 intermediate casing, landed at 5000'. Stage collar at 1725'. Cemented through collar with 250 sacks regular. Cemented through stage collar with 150 sacks regular. Drilled out collar. Drilled up hole to drill with air. Drilled 7 3/4" hole with air from 5000' to 6909'. Core #1 from 6909' to 6917'. Mudded up, cut core #2 from 6917' to 6952'. Lost circulation at 6952'. DSP #1, 6922-6975', recovered 51 drilling mud. Core #3, 6975' to 7009'. Lost circulation at 6989'. Ran radiation tool, found lost circulation zone 6172-6500' in Hermosa. Spotted 100 sacks neat with 100 cu ft. pdmix followed with 100 sacks neat at 6530'. Drilled cement plug to 6474', lost circulation. Spotted 150 sacks cement. Found cement at 6320'. Spotted 120 sacks regular cement. Drilled cement from 5900' to 6470'. No lost circulation. Drilled cement from 6470' to 6530', circulated to bottom. Drilled hole from 7009' to 7011'. DSP #2, 6975-7011'. Gas to surface in 14 mins., recovered 210# HBGM. Bucket of mud settled out to 7011' free oil. Core #4, 7011' to 7027'. Drilled 7027'-7029'. Core #5, 7029' to 7069'. Core #6, 7069' to 7107'. Drilling break at 7107'. Mud wt. 10.6#/gal. Well started cutting gas. Closed rams and opened 3" kill line. Well started blowing mud out of hole. Closed 3" kill line. Rams blow out on blowout preventer from increase in pressure. Tried to kill well with mud but due to lost circulation, mud supply became exhausted before well could be brought under control. Well blowing out of control. Gas cut hole in drill pipe and drill pipe parted. Closed blind rams. Well killed 5-13-61 by pumping in 12.6#/gal. mud. Set bridge in 8 5/8" casing at 1909' and shut off well. Installed new blowout preventer and manifold. Drilled out plug and cleaned out to T.D. of 7113'. Ran 227 jts. of 5 1/2" casing from surface to 7113'. Cemented with 200 sacks regular. Cement top found at 6570'. Drilled out 1 1/2" hole to T.D. of 7114'. Perforated 5 1/2" casing from 7097' to 7113' with 1 jet per foot. Released rig 5-25-61. Ran ZIP survey. BIR at 7000', 3721 psig. Average gas gradient 0.10. Est production test unit. Tested for four days. Calculated absolute open flow potential, 21,500 MCFGPD and 333 barrels 71.6° API gravity condensate. Helium content of gas measured 5.4%. Well shut in pending gas sales contract.



GEOLOGICAL SURVEY  
 DEPARTMENT OF THE INTERIOR  
 UNITED STATES

FORM NO. 1-28-110-21  
 REVISION 11-60

FIELD OR DISTRICT SO. DISTRICT  
 DISTRICT NUMBER  
 FIELD OFFICE

FOLD

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....  
 Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 7114 feet, and from ..... feet to ..... feet  
 Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

November 29, 1961 ..... Put to test ..... May 29, 1961 .....  
 The production for the first 24 hours was 333 barrels of condensate of which .....% was oil; .....% emulsion; .....% water; and .....% sediment. Gravity, 71.6

If gas well, cu. ft. per 24 hours 21,500 (CAO) Gallons gasoline per 1,000 cu. ft. of gas .....  
 Rock pressure, lbs. per sq. in. 2731

EMPLOYEES

....., Driller Contractor: Aspen Drilling Company .....  
 ..... , Driller ..... , Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
1280	1387	107	Greenhorn
1387	1552	165	Dakota
1552	2615	1063	Morrison
2615	2637	22	Todilto
2637	2733	96	Entrada
2733	2785	52	Carmel
2785	3248	463	Navajo
3248	3886	638	Chinle
3886	4034	148	Shinarump
4034	4121	87	Moonkopi
4121	4735	594	De Chelly
4735	6035	1320	Organ Rock
6035	6641	606	Hermosa
6641	6672	31	Paradox
6672	7114	442	Paradox Limestone

UNITED STATES  
DEPARTMENT OF THE INTERIOR

SUBMIT IN TRIPPLICATE  
(OTHER FEDERAL AGENCIES ON REVERSE SIDE)

Form Approved  
Public Law No. 42 RU424

GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for a well which is being drilled or reworked for a different reservoir.  
See instructions on reverse side.)

1.  NEW WELL  EXISTING WELL  OTHER

2. NAME OF OPERATOR  
John F. Stayer

3. ADDRESS OF OPERATOR  
Box 51, Farmington, New Mexico 87401

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

14. PERMIT NO. 10801 WNT

5. LEASE DESIGNATION AND SERIAL NO.

6. INDIAN ALLIANCE OR TRIBE NAME

7. STATE AGENCY NAME

8. NAME OF LEASE NAME

9. WELL NO.

10. FILED AND FILE NO. OR WILD CAT

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

12. COUNTY OR PARISH 13. STATE

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
<input type="checkbox"/> TEST WATER SHUT-OFF	<input type="checkbox"/> FILL OR ALTER CASING	<input type="checkbox"/> WATER SHUT-OFF	<input type="checkbox"/> REPAIRING WELL
<input type="checkbox"/> FRACTURES TREAT	<input type="checkbox"/> MULTIPLE COMPLETE	<input type="checkbox"/> DEEP RE-ALIGNMENT	<input type="checkbox"/> ADDING CASING
<input type="checkbox"/> SHOOT OR ACIDIZE	<input checked="" type="checkbox"/> ABANDON*	<input type="checkbox"/> SHOOTING OR ACIDIZING	<input type="checkbox"/> REPAIRING CASING*
<input type="checkbox"/> REPAIR WELL	<input type="checkbox"/> CHANGE PLANS	(Other)	

(Note: Report results of production completion on Well Completion or Abandonment Report and L-2 form.)

17. IN SINGLE HOLES 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 bottom hole and measured depth, vertical depth, true and magnetic dip, and other pertinent data to the work.)

From one to plus 4 abandon this well

Test and log follows: 519 - 1391 - 1355  
 2640 - 4210 - 6035 - 6641  
 6670 - T.D. 7113 - completed  
 Log shows as follows: 7097  
 7113 ft. s. with 28' plug - 58.7  
 stone collar 1012 - 14 4/8" - 7113  
 cemented plug in 28' - 7113  
 61' - 27'01" - 23' - 23' - 0" with and returns  
 280' - 27'01" - 23' - 23' - 0" with and returns

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

SIGNED: [Signature] TITLE: MANAGER DATE: 10/1/65

(This space for Federal or State official use)

APPROVED BY: [Signature] TITLE: MANAGER DATE: 10/1/65

COPIES OF APPROVAL IF ANY:

\*See Instructions on Reverse Side