

PEABODY WATER WELL NAVAJO NO. 5 *W.W.*
NE/SW Sec 34-36N-18E, Navajo Co. 180

P.W.

County Navajo

Area Black Mesa

Lease No. _____

Well Name PEABODY COAL COMPANY WATER WELL NAVAJO NO. 5

Location NE/SW Sec 34 Twp 36N Range 18E Footage ~ 2320' fs | 1550' fw |
Elev 6606 ^{KB} _{Gr} 6594' ^{GR} _{KB} Spud Date _____ Completed Abandon 5/1968 Total Depth 3749

Contractor _____

Casing Size _____ Depth _____ Cement _____

Drilled by Rotary _____
Cable Tool _____

Production Horizon _____

Initial Production _____

REMARKS _____

Elec Logs INDUCTION GAMMA RAY LOG

Applic. _____ Plugging _____ Completion _____
to Plug _____ Record _____ Report _____

Sample Log _____
Sample Descript. _____
Sample Set _____
Core Analysis _____
DSTs _____

Water well accepted by _____

Bond Co. & No. _____

Bond Am't \$ _____ Cancelled _____ Date _____
Organization Report _____

Filing Receipt _____ Dated _____ Well Book _____ Plat Book _____

Loc. Plat _____ Dedication _____

API NO. _____

Permit Number _____ Date Issued _____

W.W. 180

WW 180

NAVAJO No. 5 WELL
LITHOLOGIC SAMPLE LOG

Depth Interval	Lithologic Description
10 - 20	Sandstone-shale, burned.
20 - 30	Same as above with coal.
30 - 100	Sandstone-shale, burned.
100 - 140	Sandstone, ash and coal.
140 - 150	Cement.
150 - 190	Cement and burn.
190 - 210	Sandstone, white, very fine grained.
210 - 230	Abundant coal, dirty.
230 - 240	Coal, 90%.
240 - 280	Coal and clay.
280 - 320	Shale, gray.
320 - 340	Shale, gray with coal.
340 - 350	Coal.
350 - 370	Shale-sandstone, gray.
370 - 380	Shale and sandstone as above with 50% coal.
380 - 400	Sandstone, gray.
400 - 420	Sandstone, gray with 50% coal.
420 - 430	Shale, gray.
430 - 490	Sandstone, gray.
490 - 510	Shale, gray.
510 - 520	Sandstone - shale gray.
520 - 570	Sandstone, gray.
570 - 610	Sandstone, white, medium-coarse grained.
610 - 630	Sandstone as above with pyrite.
630 - 640	Sandstone as above with chert.
640 - 680	Sandstone, white, coarse grained, frosted grains.
680 - 710	Sandstone-shale, gray.
710 - 760	Sandstone, very fine grained with 50% gray shale.
760 - 790	Same as above with pyrite.
790 - 1300	Shale, gray.
1300 - 1330	Shale, gray with 3% very fine grained sandstone. (Cave?)
1330 - 1360	Shale, gray.
1360 - 1370	Shale, gray with 3% chert.
1370 - 1390	Shale, gray.
1390 - 1520	Sandstone (60%) gray-white, very fine grained, carbonaceous
1520 - 1530	Shale, reddish brown and green.
1530 - 1550	Shale as above with copper carbonate.
1550 - 1600	Sandstone, white, very fine grained.
1600 - 1630	Sandstone, white, very fine to medium grained.
1630 - 1810	Sandstone, very fine grained.

Mesa Verde

Dakota
Mancoes

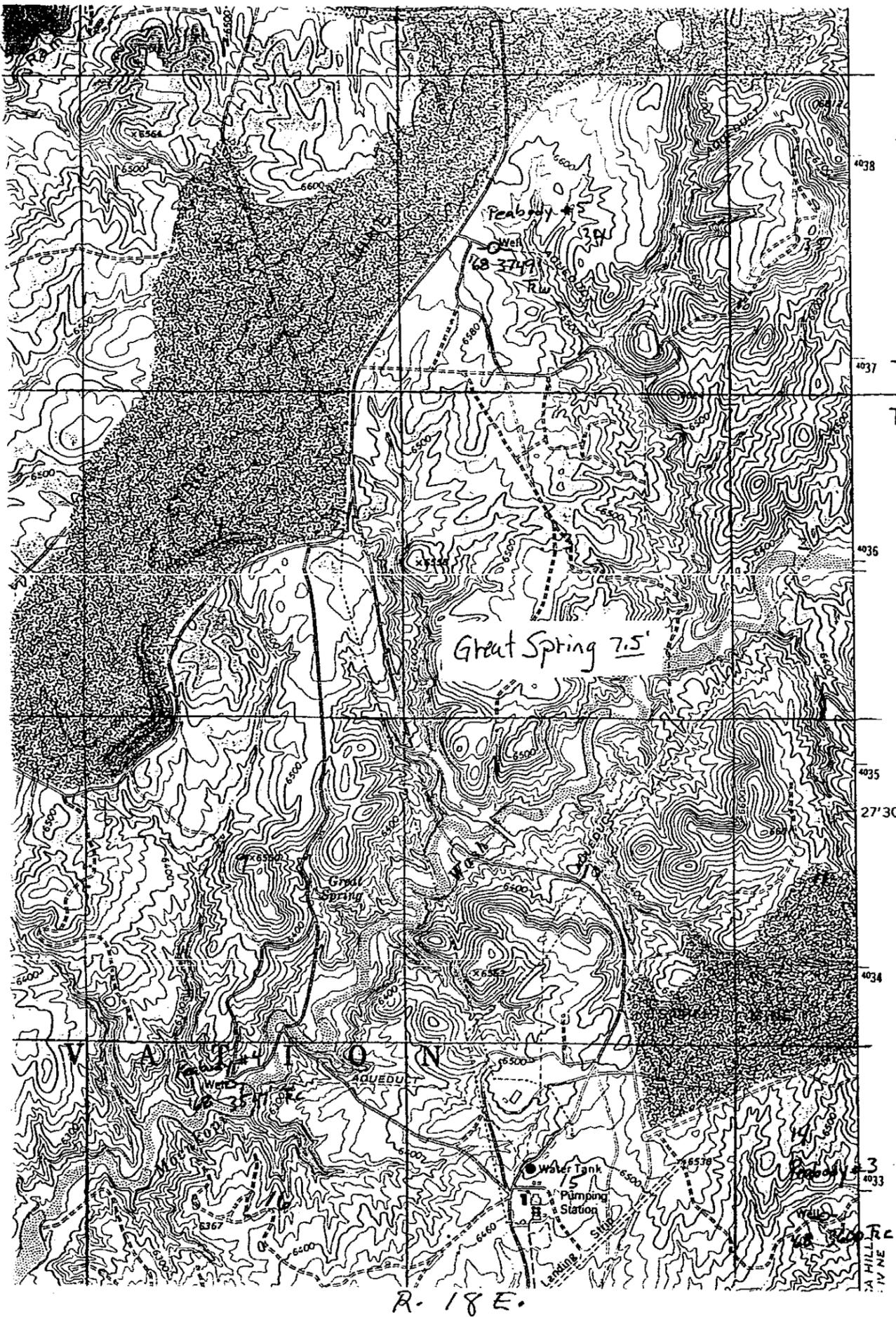
810

1440

1595

Navajo No. 5 Well (continued)

		<u>Depth Interval</u>	<u>Lithologic Description</u>	
		1810 - 1830	Shale, reddish brown.	
		1830 - 1850	Sandstone, coarse grained with transparent grains.	
		1850 - 1880	Shale, reddish brown.	
		1880 - 1950	Sandstone, fine to medium grained.	
		1950 - 1960	Sandstone as above with pyrite.	
		1960 - 1980	Shale, reddish brown with pyrite.	
		1980 - 2000	Shale, reddish brown.	
Morrison		2000 - 2010	Sandstone, white, very fine grained.	
		2010 - 2060	Sandstone as above with pyrite.	
		2060 - 2070	Sandstone as above with abundant pyrite and carbonaceous material.	
		2070 - 2100	Sandstone as above.	
		2100 - 2140	Sandstone, reddish brown, very fine grained.	
		2140 - 2170	Cement.	
		2170 - 2250	Sandstone, reddish brown-pink, very fine grained.	
		2250 - 2290	Mudstone, red, poor samples.	
	Entrada		2290 - 2300	Poor sample.
			2300 - 2430	Sandstone, reddish brown-white, very fine grained.
		2430 - 2500	Mudstone, reddish brown-white, bentonitic.	
		2500 - 2540	Shale, reddish brown.	
Carmel		2540 - 2550	Shale (?) mottled blue green and reddish brown.	
		2550 - 2600	Sandstone, pink-reddish brown, very fine grained, 10%.	
		2600 - 3140	Sandstone as above, 90%.	
		3140 - 3150	Shale, chocolate brown, and mottled blue green. (cave?)	
Navajo		3150 - 3200	Sandstone, very fine grained.	
		3200 - 3300	Shale, chocolate brown. (cave?)	
		3300 - 3310	Sandstone, very fine grained, 50%.	
		3310 - 3380	Same as above with abundant white chert.	
		3380 - 3400	Sandstone, 70-80% very fine grained.	
		3400 - 3410	Chert, 50%, white.	
Kayenta		3140 - 3420	Sandstone 80% white-reddish brown very fine grained, reddish brown shale and chert.	
		3420 - 3430	Shale, barn red.	
		3430 - 3450	Shale, reddish brown and chert.	
		3450 - 3460	Sandstone, reddish brown, very fine grained, 50%.	
		3460 - 3470	Sandstone as above with 30% chert.	
Wingate		3470 - 3490	Same as above with reddish brown shale.	
		3490 - 3500	Same as above with only 10% sandstone.	
		3500 - 3520	Sandstone, very fine grained.	





OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

October 2, 1969

Gentlemen:

There has been some misunderstanding expressed concerning my letter to you of September 24, 1969 referring to the wells drilled in the Black Mesa area of Navajo County, Arizona, by Peabody Coal Company.

This information was released for you should you wish to publish same.

Yours truly,

John Bannister
John Bannister
Executive Secretary

Western Oil Reporter
Oil & Gas Journal
P.I.
Utah Oil Report
Munger Oilgram
SW Oil & Gas News
Ariz Natl Resource Serv

September 29, 1969

Mr. Guido Zecca
Gallup Blueprint & Engineering Corp.
303 South 2nd Street
Gallup, New Mexico 87301

Dear Mr. Zecca:

The Arizona Oil and Gas Conservation Commission is releasing all logs and related information concerning six deep water wells drilled by Peabody Coal Company at Black Mesa, Arizona, on the Navajo Reservation.

Under separate cover we are sending you the sepias of the well logs, and a location plat, on a loan basis.

Our release to industry states that interested individuals may obtain a copy of this material from Gallup Blueprint and Engineering Corporation, 303 South 2nd Street, Gallup, New Mexico, Telephone No. (505) 863-9396.

It is our understanding that you have complete responsibility for the handling and sale of this material, and are prepared to render prompt service.

Very truly yours,

John Bannister
Executive Secretary

/vb

Peabody Coal

September 24, 1969

Mr. Paul Lewis
Pan American Oil Co.
591 Airport Drive
Farmington, New Mexico 87401

Dear Paul:

I attempted to call you earlier today and failed to get through. I would appreciate it if you would release the attached information at your next scout check.

The Commission does have logs on the wells and, as you noted, we made arrangements for the commercial purchase of this information.

Hope to see you soon.

Sincerely,

John Bannister
Executive Secretary

/vb

Enc.

OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

September 24, 1969

Gentlemen:

The Arizona Oil and Gas Conservation Commission has released all available information concerning six deep water wells drilled since 1965 in the Black Mesa area, Navajo County, Arizona, on the Navajo Reservation, by Peabody Coal Company.

Shows of oil and gas were encountered in the Dakota during the drilling of one well which had 43 feet of indicated log porosity. A heavy oil scum covered the mud pits, and gas bubbles were visible in the flow line. No shows were reported in the other five wells. All of the wells exhibit considerable structural deformation, and all penetrated the Coconino formation.

A packet of information containing logs and a location plat is available from Gallup Blueprint & Engineering Corp., 303 South 2nd St., Gallup, New Mexico 87301, Telephone No. (505) 863-9396.

Yours truly,

John Bannister
Executive Secretary

/vb

SAMPLE

Mr. Guido Zecca
Gallup Blueprint & Engineering Corp.
303 South 2nd Street
Gallup, New Mexico 87301

Dear Mr. Zecca:

The Arizona Oil and Gas Conservation Commission is releasing all logs and related information concerning six deep water wells drilled by Peabody Coal Company at Black Mesa, Arizona, on the Navajo Reservation.

Under separate cover we are sending you the sepias of the well logs, and a location plat, on a loan basis.

Our release to industry states that interested individuals may obtain a copy of this material from Gallup Blueprint and Engineering Corp., 303 South 2nd Street, Gallup, New Mexico, Telephone No. (505) 863-9396.

It is our understanding that you have complete responsibility for the handling and sale of this material, and are prepared to render prompt service.

Very truly yours,

John Bannister

MINERALS DEPARTMENT

September 22, 1969

Mr. Guido Zecca
Gallup Blueprint & Engineering Corp.
303 South 2nd Street
Gallup, New Mexico 87301

Dear Mr. Zecca:

Delivered herewith are sepias of six wells drilled by Peabody Coal Co., at Black Mesa, in Navajo County, Arizona.

This material has been released by Peabody Coal Co., through the Arizona Oil and Gas Conservation Commission, of Phoenix, Arizona. They are preparing a letter of verification to you.

Interested operators may contact you for copies of this material. This office is not interested whatever in the selling or handling of copies purchased by interested persons, operators, companies, etc.

The following sepias have been loaned to you this date:

Well #1	6 sepias
Well #2	1 sepia
Well #3	1 sepia
Well #4	1 sepia
Well #5	1 sepia
Well #6	1 sepia
<u>TOTAL</u>	<u>11 sepias.</u>

Very truly yours,

/S/ PERRY K. HURLBUT

Perry K. Hurlbut
Minerals Supervisor

Bannistell
Attachments
cc: Chrono
File
PKH:bjm:9/22/69

Memo to Mr. Bannister

September 22, 1969

Memo from J. Lambert

P. K. Hurlbut called today. He is mailing material on the #1 well. Same cover he is furnishing you a letter for the public release for P. I. and many others. He requests that you release the letter as nearly as he has written it as possible. He says that he has labored hard over the text of this letter and hopes that you will see fit to let it go as is. He also has included a letter that he would like for you to send to blue print company at Gallup. He has no druthers on this particular letter.

He has furnished them sepias of the logs on the #1, 2, 3, 4, 5, and 6 wells on a loan basis and apparently this letter is just the Commission's verification of this situation.

He would like for you to release these letters Wednesday if you have the time and inclination. He will talk to you on Monday the 29th or Tuesday the 30th.

94

THE NAVAJO TRIBE
WINDOW ROCK, ARIZONA
MINERALS DEPARTMENT

RAYMOND NAKAI
CHAIRMAN, Navajo Tribal Council

NELSON DAMON
VICE CHAIRMAN, Navajo Tribal Council



September 22, 1969

Mr. John Bannister
Arizona Oil and Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona 85007

Dear John:

The following is a suggested release to P.I. and other agencies concerning the Peabody water wells at Black Mesa:

OIL AND GAS SHOWS REPORTED

The Arizona Oil and Gas Conservation Commission has released all information concerning six deep water wells drilled since 1965 in the Black Mesa area, Navajo County, Arizona, on the Navajo Reservation, by Peabody Coal Co.

Shows of oil and gas were encountered in the Dakota during the drilling of one well which had 43 feet of indicated log porosity. A heavy oil scum covered the mud pits, and gas bubbles were visible in the flow line. No shows were reported in the other five wells. All of the wells exhibit considerable structural deformation, and all penetrated the Coconino formation.

A packet of information containing logs and a location plat is available from Gallup Blueprint & Engineering Corp., 303 South 2nd St., Gallup, New Mexico 87301. Telephone No. (505) 863-9396.

We have this date loaned the sepias of these logs, and a location plat, to Gallup Blueprint. The packet of material they will supply includes one copy each of all logs and the location plat.

We certainly appreciate your assistance in this matter.

Sincerely,

Handwritten signature of Perry K. Hurlbut.
Perry K. Hurlbut
Minerals Supervisor

9-16-69

John — a

letter will follow.

Just stick these
in your files.

Mum's the word
until I get the rest of
the facts to you.

about 1 week

PKH

THE NAVAJO TRIBE
WINDOW ROCK, ARIZONA
MINERALS DEPARTMENT

RAYMOND NAKAI
CHAIRMAN, Navajo Tribal Council

NELSON DAMON
VICE CHAIRMAN, Navajo Tribal Council



August 8, 1969

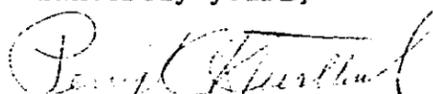
Mr. James Scurlock
Arizona Oil and Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona 85007

Dear Mr. Scurlock:

The correct log top for the Pdc in the Peabody #1 water well at Black Mesa is 4963. Measured from the KB of 6403, this results in a datum of + 1440.

The other five wells did not penetrate the Pdc. However, if you are interested I can give you the Kd datums.

Sincerely yours,


Perry K. Hurlbut
Minerals Supervisor



Peabody

#1 C-20-36N-18E

2, SE SE ~~SE~~ " "

3, SWNW 14-35N-18E

4. NE NW 16-35N-18E

5. NE SW 34-36N-18E

6. C-N $\frac{1}{2}$ N $\frac{1}{2}$ 26-36N-18E

Elev:

1 6409 KB

2 6552 KB

3 6458 KB

4 6241 KB

5 6606 KB

~~6606 KB~~

6. 6686 KB

PKA

T.D.

1- 5149

2. 3642

3. ~~3742~~ 3602

4. 3527

5. 3742

6. 3564