

7-2-30 d.c.
Fall River

 Lsd 3576210
SCHEDULED

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: SW 1/4 SE 1/4 SE Section 30 Township 7S Range 2E

 Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

 Date well drilling completed 6-8-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	50	ft.
0-25	Yellow-Brown Sandy Soil	Depth to static water level	21.9'	ft.
25-30	Gray Mudstone	Name of producing aquifer (if known)	Fall River	
30-40	Red Shale	Total depth of drill hole	127	ft.
40-55	Gray Mudstone w/Gray Sandstone	Depth to bottom of casing	126'	ft.
55-80	Lt. Gray Sandstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.		
80-100	Dark Gray Shale & Siltstone			
100-125	Gray Sandstone			
125-127	Lt. Tan-Gray Claystone			
		1" Scheduling 40 Black Iron		
		Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.		
		Torch Slotted 84-126		
		If a flowing well, flow of completed well		
		G.P.M.		

Attach sheet if more space is needed

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____

Type of pump _____ Capacity of installed pump _____ G.P.M.

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

7-293080c (a)
Fall River

led 3520+10
Burdock and

(1) WELL CONSTRUCTION

Location of well SW 1/4 SE 1/4 SE Section 30 Township 7S Range 2E

Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed 6-7-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
0-30	Yellow & Brown Sandy Mudstone	215	ft.
30-45	Red Shale	+26	ft.
45-50	Gray Mudstone	Name of producing aquifer (if known)	Lakota
50-90	Lt. Gray & Tan Sandstone	Total depth of drill hole	325 ft.
90-125	Dark Gray Claystone with Brown-Gray Sandstone	Depth to bottom of casing	294 ft.
125-175	IB Gray & Green Claystone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
175-180	Red Shale	1" Scheduling 40 Black Iron	
180-185	Green Claystone	Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
185-200	Lt. Gray Sandstone	Torch Slotted 252-294	
200-215	Variegated Mudstone	If a flowing well, flow of completed well est. 3 G.P.M.	
215-235	Lt. Gray-White Sandstone	Silver King Mines, Inc.	
235-260	Gray-Green Mudstone	Name of Drilling Contractor	
260-280	IB Brown Sandstone & AA	Attach sheet if more space is needed	
280-305	Gray-Brown Mudstone-Siltstone	305-320 Black Shale	
305-320	Black Shale	320-325 Gray-Green Shale	

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____
Type of pump _____ Capacity of installed pump _____ G.P.M.
Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

0. a - 2300a
Fall River
led 3625-15
Edgemont, S.D.
SCHEDULED

(1) WELL CONSTRUCTION

Location of well NE 1/4 NW 1/4 NW Section 23 Township 8S Range 2E

Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)Date well drilling completed 6-7-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
0-25	Brown Sand	260	ft.
25-260	Gray Shale	47.9	ft.
260-280	Gray Sandstone	Name of producing aquifer (if known)	Fall River
280-315	Gray Claystone	Total depth of drill hole	390
315-335	Gray Sandstone	Depth to bottom of casing	378
335-360	18 Gray Sandstone, Gray Claystone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
360-390	Gray Sandstone		
		1" Schedules 40 Black Iron	

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

torch slotted 336-378

If a flowing well, flow of completed well G.P.M.

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump HP

Type of pump Capacity of installed pump G.P.M.

Depth of pump placement ft., Date of pump installation

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed ft., tube diameter tube material

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

00 5266a
Fall River

SC 100000

led 3625415
Electric grade

(1) WELL CONSTRUCTION

Location of well: NE 1/4 NW 1/4 NW Section 23 Township 8S Range 2E

Well owner: Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed: 6-29-78 Purpose of well: Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Reservoir	Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	520	ft.
	0-20	Brown Soil	Depth to static water level	136.5	ft.
Grimes New Castle	20-340	Gray Shale	Name of producing aquifer (if known)	Lakota	
	340-370	18 Brown & Gray Mudstone & Gray Sandstone	Total depth of drill hole	660	ft.
	370-420	Brown Mudstone	Depth to bottom of casing	630	ft.
Fall River	420-440	Gray Sandstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.		
	440-490	Gray Shale w/Gray Sandstone			
	490-510	Gray Sandstone	1" Scheduling 40 Black Iron		
	510-520	Green Mudstone & Siltstone			
Fall River	520-575	Gray Sandstone	Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.		
	575-640	Red Sandstone & Conglomerate			
	640-650	Red Conglomerate & Dark Gray Shale			
Morrison	650-660	Gray-Green Shale	Torch Slotted 588-630		
			If a flowing well, flow of completed well		

Attach sheet if more space is needed

Silver King Mines, Inc.
Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump: HP

Type of pump: Capacity of installed pump: G.P.M.

Depth of pump placement: ft., Date of pump installation:

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed: ft., tube diameter: tube material:

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

Fall River
Red 3120-15
SCHEDULED
For interest

WELL CONSTRUCTION

Location of well: SW 1/4 SE 1/4 Section 10 Township 7S Range 1E

Well owner: Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
 (Name) (Address)

Date well drilling completed: 11-7-78 Purpose of well: Observation
 (domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	ft.
0-20	Weathered Brown Clay and Silt	504	ft.
20-250	Dark Gray Shale	Depth to static water level	ft.
250-375	Interbedded Gray Claystone, Lt. Gray Sandstone	Name of producing aquifer (if known)	Lakota
375-410	Dark Gray Claystone	Total depth of drill hole	550
410-505	Lt. Gray-White Siltstone and Green Claystone	Depth to bottom of casing	504
505-550	Red-Brown Sandstone w/Gray Mudstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	

4 1/2" Scheduling 40 Black Iron

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

Open Hole 504-550

If a flowing well, flow of completed well est. 40 G.P.M.

Attach sheet if more space is needed

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____

Type of pump _____ Capacity of installed pump _____ G.P.M.

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____.

Name of Pump Installation Contractor



6/1/68
SCHEDULED

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well NW 1/4 NE 1/4 Section 15 Township 7S Range 1E

Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(name) (Address)Date well drilling completed 10-25-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	510	ft.
0-25	Brown Weathered Shale	Depth to static water level		ft.
25-235	Gray Shale	Name of producing aquifer (if known)	Lakota	
235-265	AA with Lt. Gray Sands Siltstone	Depth of drill hole	550	ft.
265-335	Brown Mudstone with Gray Sandstone & Gray-Green Mudstone	Depth to bottom of casing	510	ft.
335-355	Gray Shale & Sandstone Siltstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.		
355-370	Tan-Gray Siltstone	4 1/2" Black Iron Schedules 40		
370-390	Gray & Green Shale			
390-405	Dark Brown Mudstone			
405-440	Lt. Green Claystone-Siltstone	Screen information: In the space below show length of screen below bottom casing, diameter and kind of screen or casing perforations.		
440-475	White Siltstone, Sandstone			
475-485	Green Mudstone	Open Hole 510-550		
485-495	Tan Mudstone-Siltstone			
495-510	Gray Sandstone, Brown Mudstone	If a flowing well, flow of completed well est. 35 G.P.M.		
510-550	Red-Brown SS			

Attach sheet if more space is needed

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____

Type of pump _____ Capacity of installed pump _____ G.P.M.

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____ tube material _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

SCHEDULED

(1) WELL CONSTRUCTION

Location of well NW 1/4 NE 1/4 Section 15 Township 7S Range 1E

 Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
 (Name) (Address)

 Date well drilling completed 10-19-78 Purpose of well Observation
 (domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	ft.
0-20	Weathered Brown Clay & Silt	377	ft.
20-250	Dark Gray Shale	Depth to static water level	ft.
250-260	Interbedded Gray Clay-stone & Lt. Gray Sandstone	Name of producing aquifer (if known) Lakota-Fuson	ft.
260-355	Gray Clay Stone	Total depth of drill hole 395	ft.
355-375	Lt. Gray-White Siltstone	Depth to bottom of casing 377	ft.
375-390	Gray & Green Shale	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
390-395	Dark Brown Mudstone		
		4 1/2" Scheduling 40 Black Iron	
		Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
		Open Hole 377-395	
		If a flowing well, flow of completed well < 1 G.P.M.	

Attach sheet if more space is needed

 Silver King Mines, Inc.
 Name of Drilling Contractor

(2) PUMP INSTALLATION

 Company name and size of pump _____ HP
 Type of pump _____ Capacity of installed pump _____ G.P.M.
 Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

 Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____
 tube material _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

SCHEDULED

(1) WELL CONSTRUCTION

Location of Well: NW 1/4 NE 1/4 Section 15 Township 7S Range 1E

Well owner: Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed: 10-18-78 Purpose of well: Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
0-10	Weathered Brown Clay & Silt	300'	ft.
10-250	Dark Gray Shale	Depth to static water level	ft.
250-260	Interbedded Gray Claystone & Lt. Gray Sandstone	Name of producing aquifer (if known)	Fall River
260-295	Med. & Lt. Gray Claystone	Total depth of drill hole	350 ft.
295-300	AA w/trace green & Red Brown Claystone	Depth to bottom of casing	300' ft.
300-335	Lt. Gray Sandstone, Medium & Lt. Gray Claystone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
335-350	Gray-Green Mudstone, Gray Shale & Sandstone		
		4 1/2" Scheduling 40 Black Iron	
		Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
		Open Hole	300-350
		If a flowing well, flow of completed well	est. 2 G.P.M.

Attach sheet if more space is needed

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump: _____ HP
Type of pump: _____ Capacity of installed pump: _____ G.P.M.
Depth of pump placement: _____ ft., Date of pump installation: _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed: _____ ft., tube diameter: _____ tube material: _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

SCHEDULED

(1) WELL CONSTRUCTION

Location of well NW 1/4 NE 1/4 Section 15 Township 7S Range 1E

Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed 11-6-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
0-10	Orange-Brown Weathered Shale	525	ft.
10-270	Dark Gray-Black Shale		ft.
270-280	AA w/Lt. Gray Siltstone		ft.
280-390	Interbedded Dark Gray Carb. mudstone, Gray & Tan Sandstone		ft.
390-430	Dark Brown Mudstone		ft.
430-455	w/Green-Gray Claystone		ft.
455-470	Green w/Brown & Gray Claystone		ft.
470-500	Dark Brown-Gray Mudstone, trace Green Claystone; Tan Sandstone		ft.
500-525	Gray Claystone w/White Lt. Tan Siltstone-Sandstone		ft.
525-570	Gray-Brown Mudstone w/Tan Sandstone		ft.
	Gray Sandstone w/Gray-Brown Mudstone		ft.

Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.

4 1/2" Scheduling 40 Black Iron

Open Hole 525-570

If a flowing well, flow of completed well est. 35 G.P.M.

Attach sheet if more space is needed

Silver King Mines, Inc.
Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP
Type of pump _____ Capacity of installed pump _____ G.P.M.
Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____
tube material _____

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

(C) WELL CONSTRUCTION

Location of well NW 1/4 NE 1/4 Section 15 Township 7S Range 1E

Well owner Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed 11-6-78 Purpose of well Observation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer _____	ft.
0-260	Dark Gray Shale	Depth to static water level _____	ft.
260-280	Gray Shale & Sandstone	Name of producing aquifer (if known) <u>Lakota-Fuson</u>	
280-350	Gray Sandstone-Siltstone	Total depth of drill hole <u>420</u>	ft.
350-355	Dark Brown Shale	Depth to bottom of casing <u>400</u>	ft.
355-395	Gray Shale & Sandstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
395-420	Gray-Green Mudstone	<p style="text-align: center;"><u>4½"</u> Schedules 40 Black Iron</p>	
		Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
		<p style="text-align: center;">Open Hole 400-420</p>	
		If a flowing well, flow of completed well _____ G.P.M.	

Attach sheet if more space is needed

Silver King Mines, Inc.
Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____

Type of pump _____ Capacity of installed pump _____ G.P.M. _____

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells on air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____,
tube material _____.

Name of Pump Installation Contractor



NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: SE 1/4 SW 1/4 Section 11 Township 7S Range 1E

Well owner: Tennessee Valley Authority, P. O. Box 49, Edgemont, South Dakota
(Name) (Address)

Date well drilling completed: 7-26-78 Purpose of well: Test
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
0-30	Brown & Gray Soil	665	ft.
30-95	Brown-Gray Mudstone, Siltstone	Depth to static water level	+ 240 ft.
95-135	1B Lt. Gray Sandstone, and	Name of producing aquifer (if known)	Sundance
135-205	Gray Mudstone, and	Total depth of drill hole	880 ft.
205-280	Variegated Mudstone & Siltstone	Depth to bottom of casing	780 ft.
280-305	Tan & Gray Sandstone	Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.	
305-335	Gray Sandstone	5 1/2" 14# Steel Casing	
335-400	1B Brown-Gray Mudstone, Gray Sandstone	Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
400-665	Gray, Brown & Green Mudstones	Torch Slotted 666-780	
665-780	1B Red-Brown Sandstone and Gray & Green Claystone		
780-840	Black Shale & Gray-Green Claystone		
840-880	Red Siltstone-Mudstone		

Attach sheet if more space is needed

If a flowing well, flow of completed well: 4 G.P.M.

Silver King Mines, Inc.

Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump: HP

Type of pump: Capacity of installed pump: G.P.M.

Depth of pump placement: ft., Date of pump installation:

(3) WATER SURFACE MEASURING TUBE

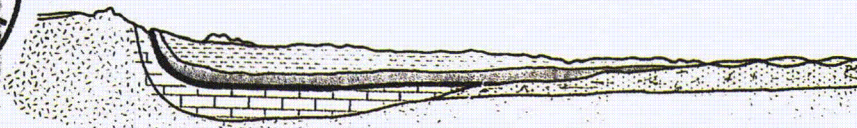
On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed: ft., tube diameter: tube material:

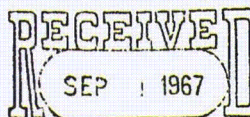
Name of Pump Installation Contractor



WESTERN FIELD OFFICE, 507½ STATE ST., BELLE FOURCHE,
BOX 187, 57717, PHONE 892-3121



Western Field Office
August 31, 1967



STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

Mr. George L. Costes
Star Route
Edgemont, South Dakota

Re: ConRoy #1 State
NYSW-24-7S-1E
Fall River County, South
Dakota
Permit No. 370

Dear Mr. Coates:

Your August 28 letter has been received in which you mention you want to convert the above oil test to a water well for agricultural use.

The oil test was plugged September 10, 1964. The bond was released January 26, 1965. The State Oil and Gas Board no longer has jurisdiction over the test hole.

Approval to complete the oil test as a water well should be obtained from the Water Resources Commission, State Office Building, Pierre, South Dakota. Their phone number is Capitol 4-5911, Extension 343. Mr. Joe Grimes is the Chief Engineer.

The test was drilled to a depth of 2,467 feet. The surface casing consisted of 487 feet of 8 5/8-inch pipe cemented with 275 sacks of cement. The formation tops as picked by the company geologist are:

Dakota	50
Lakota	237
Sundance	540
Basal Sundance	
sand	854
Spearfish	894

Minnekahta	1397
Minnelusa	1470
2nd Converse sand	1525
3rd Converse sand	1655
2nd Leo zone	2060

DUNCAN J. MCGREGOR
DIRECTOR AND STATE GEOLOGIST
VERMILLION

MERLIN J. TIPTON
ASSISTANT STATE GEOLOGIST
VERMILION

EARL J. COX
SENIOR GEOLOGIST
BELLE FOURCHE

Mr. George L. Coates

page 2

August 31, 1967

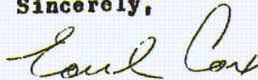
Cement plugs were placed at approximately the following depths:

420-600
835-910
1460-1525

1640-1715
2060-2135

If I can be of further help, please contact me.

Sincerely,


Earl Cox
State Geologist

EC:rp

cc: State Geologist
Water Resources Commission ✓

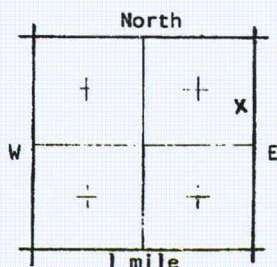
STATE OF SOUTH DAKOTA WELL DRILLERS REPORT

Location SE 1/4 NE 1/4 Sec 19 Twp 65 Rg 1 E

County

CUSTER

Please mark well location with an "X"

Well Completion Date OCT 16 1984

PROPOSED USE:

☐ Domestic ☐ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☒ Stock

Method of Drilling:

ROTARY MUDWELL CONSTRUCTION: TO 520 4" TO 900Diameter of hole 6" inches Depth 4 feetCasing: ☐ Steel ☒ Plastic ☐ Other
Specify 6" VELCO 40 SCREWPipe Weight Diameter From To
1b/ft 6" inches 0 feet 520 feet1b/ft 4" inches 500 feet 900 feetWas a well screen used? ☒ Yes ☐ No

If Not Specify

Screen Type PVC Slot Size 1/64Length 60' Diameter 4"Was Casing left open end? ☒ Yes ☐ NoWas a Packer or seal used? ☒ Yes ☐ NoIf so what material? RUBBERWas well gravel packed? ☐ Yes ☒ NoWas well grouted? ☒ Yes ☐ NoDescribe grouting procedure PRESSURE GROUT6" PIPE 0 TO 520To what depth? 520 FeetWhat was grouting material? TYPE II CEMENTIf cement, how many sacks? 100Location of packer(s) and screen or perforated pipe PACKER 780 SCREEN 780TO 100 - 1840 - 880WAS WELL PLUGGED OR ABANDONED ☐ Yes ☒ No

If so how and with what material?

Well Owner: MONIECE NEVILLE OPERATIONName BERNARD & LOWHAM PARTNERSAddress BOX 567 CUSTER WYO 82602

Well Log:

Depth

Formation

From

To

<u>SHALE</u>	<u>0</u>	<u>480</u>
<u>FALL RIVER</u>	<u>480</u>	<u>600</u>
<u>FUSON</u>	<u>600</u>	<u>740</u>
<u>LAKOTA</u>	<u>740</u>	<u>885</u>
<u>MARRIOTT</u>	<u>885</u>	<u>900</u>

STATIC WATER LEVEL 0 FeetIf flowing: closed in pressure 2 PSIGPM flow 16 through 6" inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other

If other; specify

Can well be completely shut off? YES

WELL TEST DATA:

☐ Pumped☐ Bailed☐ Other

Describe:

Pumping Level Below Land Surface

ft. After Hrs. pumped GPM

ft. After Hrs. pumped GPM

ft. After Hrs. pumped GPM

Remarks:

NOTE THIS IS AN
 OFFSET TO OLD WELL, OLD
 WELL WAS CEMENTED OFF PUMPED
 16 BAGS CEMENT IN 200 FT.

This well was drilled under license # 415

and this report is true and accurate.

Drilling Firm DRAB DRILLING

Signed by

Date OCT 16 1984

12-6-84

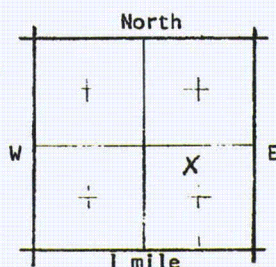
STATE OF SOUTH DAKOTA WELL DRILLER'S REPORT

Location NW 1/4 SE 1/4 Sec 18 Twp 6S Rg 1E

County

CUSTER

Please mark well location with an "X"

Well Completion Date Oct 2 1984

PROPOSED USE:

☒ Domestic ☐ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☒ Stock

Method of Drilling:

ROTARY MUDWELL CONSTRUCTION: 6" to 280'Diameter of hole 4" inches Depth 360 feetCasing: ☐ Steel ☒ Plastic ☐ Other
Specify 6" YELLOW MINE 4" SCH 40Pipe Weight Diameter From To
220 lb/ft 6 inches 0 feet 280 feet360 lb/ft 4 inches 160 feet 360 feetWas a well screen used? ☒ Yes ☐ No

If Not Specify

Screen Type 4" PVC Slot Size 1/64"Length 80' Diameter 4"Was Casing left open end? ☒ Yes ☐ NoWas a Packer or seal used? ☒ Yes ☐ NoIf so what material? PUAGENWas well gravel packed? ☐ Yes ☒ NoWas well grouted? ☒ Yes ☐ NoDescribe grouting procedure PUMPED 35BAG MIX DOWN INSIDE & UP OUTSIDETo what depth? 180 FeetWhat was grouting material? TYPE IIIf cement, how many sacks? 35Location of packer(s) and screen or perforated pipe 20 ft SCREEN 300-220 PACKER280 SCREEN 300-360WAS WELL PLUGGED OR ABANDONED ☐ Yes ☒ No

If so how and with what material?

Well Owner:

Name BUD HOLLENBECKAddress Becky Rt Box 38 EDGEWATER S.DWell Log: Depth 57735

Formation	From	To
<u>SHALE</u>	<u>0</u>	<u>80</u>
<u>FALL RIVER</u>	<u>80</u>	<u>220</u>
<u>FUSON</u>	<u>220</u>	<u>240</u>
<u>LAKEOTA</u>	<u>240</u>	<u>360</u>

STATIC WATER LEVEL 0 FeetIf flowing: closed in pressure 6 LBS PSIGPM flow 65 through 6" inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other

If other; specify

Can well be completely shut off? YES

WELL TEST DATA:

☐ Pumped☐ Bailed☐ Other

Describe:

Pumping Level Below Land Surface

ft. After Hrs. pumped

ft. After Hrs. pumped

ft. After Hrs. pumped

Remarks: THIS IS OFFSET TO OLD
WELL THAT WAS LEAKING CEMENTED
WELL INVT. PUMPED 13 BAGS IN
AT 100 FT.

This well was drilled under license # 415

and this report is true and accurate.

Drilling Firm BABY DRILLINGSigned by Russell P. RelyDate Oct 18, 1984Date 12-6-84

BRADLEY'S FINAL REPORT

OFFICE OF STATE ENGINEER
Pierre, South Dakota

Well No. (do not fill in)

FALL RIVER COUNTY

Location: SW NE¹/₄ Section 3 Twp. 7S Range 2E

Owner Robert G. Robinson Address Hot Springs, S. Dak.

Depth 247 Drawdown Type Rig Used cable tool

Flow (gpm) pumped	Pressure	Date Measured
10	100	10/10/10
20	200	10/10/10
30	300	10/10/10
40	400	10/10/10
50	500	10/10/10
60	600	10/10/10
70	700	10/10/10
80	800	10/10/10
90	900	10/10/10
100	1000	10/10/10

Grd. Elev. Water Level Below Ground Surface

Temperature Character Water (soft, medium, hard)

Date Commenced _____ Date Completed 11/14/49

Section

CASING DETAIL

<u>Type</u>	<u>Size</u>	<u>Length</u>	<u>Depth</u>
-------------	-------------	---------------	--------------

6 5/8 187 187

(60' of open hole)

PERFORATIONS

Type	Size	Length	Depth
------	------	--------	-------

SCREEN

<u>Type</u>	<u>Size</u>	<u>Length</u>	<u>Depth</u>
-------------	-------------	---------------	--------------

Is there a seal between different size pipes? What kind?

WATER BEARING SANDS

From	To
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

SOURCE OF INFORMATION

PMA office. Fall River Co.

DRILLER'S LOG

From	To
------	----

100

Richard Driller

Address

Richard Lawrence

(Signature)

Address Hot Springs, S. Dak.

Form No. JUN 16 1951

ARTESIAN WELL REPAIR

OFFICE OF STATE ENGINEER
PIERRE, S. DAK.

OFFICE OF STATE ENGINEER
Pierre, South Dakota

Well No. 24-6R
(do not fill in)

Fall River COUNTY.

Location SE 1/4 Section 23 Twp. 7S Range 1E

Owner J. E. Stewart Address Dickinson, N. Dak

Depth 240 Drawdown _____ Type Rig Used Repair

Flow (gpm) 2 1/2 Pressure Strong Date Measured June 10, 1951

Grd. Elev. _____ Water Level Below Ground Surface _____

Temperature _____ Character Water (soft, medium, hard)

Date Commenced June 6 Date Completed June 10

Bonded Driller H. P. Norbeck Address Redfield, S. D

Section 23

CASING DETAIL (old)

RECORD OF WELL AFTER REPAIR

Type	Size	Length	Depth
<u>Blk Std</u>	<u>2"</u>	<u>240'</u>	<u>240'</u>

Depth 237 Date Completed June 10, 1951
Flow (gpm) 2 1/2 Date Measured June 10, 1951
Water Level Below Ground Surface _____

CASING DETAIL (new)

Type	Size	Length	Depth
<u>Std Casing</u>	<u>3"</u>	<u>31'</u>	<u>37'</u>

driven over old 2" with 600# hammer

PERFORATIONS

Type	Size	Length	Depth
<u>222'</u>	<u>227'</u>		

1" Casing tube 1 1/2" 231' 237'

PERFORATIONS

Type	Size	Length	Depth
<u>Drilled</u>	<u>1/2"</u>	<u>158'</u>	<u>to 168'</u>
		<u>220'</u>	<u>230'</u>

SOURCE OF INFORMATION

Norbeck Co. Report

Repaired by: H. P. Norbeck

Address Redfield

Did you reach bottom on this well? No

If not, how far down did you get? 237'

What do you think caused this well to fail?

2" corroded out permitting water to come up out side

Do you believe the repair was successful? Very

Well flowed only 2 G.P.M.

when drilled - this is a Dakota Sandstone well about 2 mi from outc.

07-92

Please mark well location with an "X"

Well Completion Date

9/30/99

1 Mile

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? _____ ft. from _____ (identify source)

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

Air Rotary

If other describe

Describe grouting procedure pressure grout 19 gravel per
return

Other information 10' blk 9 cap in bottom

Describe packer(s) and location?

Laboratory sent to for water quality analysis

NO. Why Not?

owner will set own pump

Address: Denny Pt, Edgemont SD
57735

DEPTH

FORMATION

FROM

TO

aut. bearing	grey / green s.s.	0	110
	tan / buff ss	110	146
	red ss	146	160 TD

Can well be completely shut in? _____

Pumping Level Below Land Surface

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 489

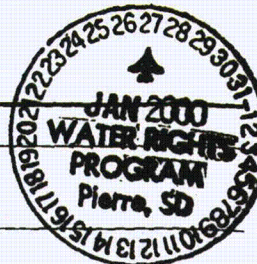
And this report is true and accurate

Drilling firm D97 Drill

Signature of License Representative

Signature of Well Owner or Equitable Property Holder:

Date: 1-21-00



9-19-79

10-31-79

Date

SMITH & ASSOC. CORNELL #1

(NENE) (SEC 27) T⁶⁵ 1 R.

0-2 SURFACE. (65 1 R)

2-26 Red silty shale streaks of Cyp.

26 surface pipe set at 72 ft. down

5 ft. cemented with 18 sack Reg. cement.

80 ft from surface 9-26 15 ft. cement in

pipe

76-95 Red silty shale streaks of Cyp

95-102 White & pink Cyp.

107-151 Red silty shale

151-195 White & gray Cyp.

195-255 Red silty shale streaks of Cyp.

255-386 hard gray limy Cyp streaks of

285-386 Red silty shale

285-386 Red silty shale

386-427 pink & light lavender limestone

427-429 Red & lavender limy shale

429-458 Red silty shale

458-482 White Cyp. streaks of Red silty shale

482-505 Red silty shale

505-517 White Cyp. streaks of pink limestone

517-520 Red silty shale test. C. 520

520-539 Red sandy shale

539-541 Pink limestone

541-570 White & pink sand

570-592 Ant. hydrate white

592-621 Pink & lavender limestone

621-638 Pink sandstone

638-667 Buff limestone & pink sand

667-723 Gray limestone

723-727 Gray shale & antihydrate

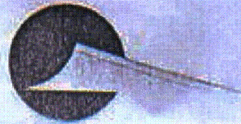
727-747 Gray Dolomite & black shale

747-784 Gray & pink dolomite

cased with 640 ft. 4 1/2 in. black pipe

cemented with 5 sacks cement. 5 shows

CEJA CORPORATION



June 20, 1990



South Dakota Dept. of Water and
Resources
Western Field Office
36 East Chicago
Rapid City, SD 57701

Attention: Anthony K. Petres, Geologist

RE: Tubbs #1-35
SE/4 SE/4 Sec 35-7S-1E
Fall River Co., SD

Gentlemen:

Pursuant to your recent request of June 15, 1990 to Weldon Spitzer, enclosed please find a written acceptance and release from Robert D. and Virginia Tubbs to convert the captioned to a freshwater well.

If you have any questions or we can be of further assistance, please feel free to contact us.

Very truly yours,

Nevin K. Cooper
Nevin K. Cooper

NKC/ho

JUL 06 1990

Jim:

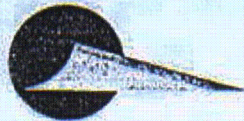
This oil test was
plugged back
and given to the
landowner for use
as a water well.

If you need
further info contact

TO:

Jim
Goodman

CEJA CORPORATION



July 27, 1989

Robert D. & Virginia Tubbs
P. O. Box 563
Edgemont, SD 57735

RE: Tubbs 1-35 Well
SE/4 SE/4 Sec 35-7S-1E
Fall River Co., SD
CWO 9506

Dear Mr. & Mrs. Tubbs:

You have requested the use of the referenced abandoned well as a potential freshwater well for which an acceptance and release is required under ARSD Article 74:10:04:02:(4)(c)(i), a copy of which is attached hereto.

Ceja hereby grants and conveys the well to you in its present condition as reflected in the attached plugging report, provided you sign and return this letter releasing Ceja of any further responsibility or liability for the well prior to its conversion for actual use as a freshwater well. You further understand that you shall assume responsibility for the well and all attendant liabilities and accept the well in its present condition without any warranty or representation of its fitness for your intended use.

Thank you for your cooperation and assistance. If we may be of further assistance, please call me at 1-800-331-3359.

Yours very truly,

Paul G. Rose
Vice President

ACCEPTANCE AND RELEASE given this 3
day of August, 1989.

BY: Robert D. Tubbs
Robert D. Tubbs

BY: Virginia Tubbs
Virginia Tubbs

PLUGGING RECORD

Operator CEJA Corporation		Address 4400 One Williams Ctr., Tulsa, OK., 74172	
Name of Lease Tubbs	Well No. 1-35	Field & Reservoir Wildcat	
Location of Well 990' FSL & 595' FEL SE SE 35-7S-1E		Sec-Twp-Rng or Block & Survey	County Fall River
Application to drill this well was filed in name of CEJA Corporation	Has this well ever produced oil or gas No	Character of well at completion (initial production): Oil (bbls/day) Gas (MCF/day) Dry? Yes	
Date plugged: July 2, 1989	Total depth 2558'	Amount well producing when plugged: Oil (bbls/day) Gas (MCF/day) Water (bbls./day) 0 0 0	
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement.
None	Water		

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped etc)	Packers and shoes
8.625	418'	None	All		

Was well filled with mud-laden fluid, according to regulations?
Yes

Indicate deepest formation containing fresh water.
Fall River-Lakota

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Wellbore was plugged back to 610' for use as fresh water well from the Lakota formation as follows:

100' plug	2108'-2208'	Red Shale Marker-2158'
100' plug	1662'-1762'	Minnelusa-1712'
100' plug	1050'-1150'	Canyon Springs-1100'
100' plug	610'-710'	Morrison-578'

with heavy mud in between plugs.

Surface Owner: Robert D. Tubbs, Box 563, Edgemont, S.D., 57735

USE REVERSE SIDE FOR ADDITIONAL DETAIL

Executed this the 27 day of July, 1989
State of Oklahoma
County of Tulsa

Weldon S. Spitzer
Signature of Notary

Before me, the undersigned authority, on this day personally appeared Weldon S. Spitzer known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this 27 day of July, 1989

SEAL

My commission expires June 28, 1990

Mary E. Rishley
Notary Public in and for
County, Oklahoma

DO NOT WRITE BELOW THIS LINE

Approved _____
Date _____

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

Secretary

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Supplemental instructions by local Federal and/or State offices will govern the use of this form.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see last blank.

If this well was directionally drilled, show both the location at the surface and at total depth from nearest lines, where possible; also show the locations at the top and at the bottom of any zone for which production data are reported in space 33, and any zone open for injection or disposal. Use this reverse side if more space is needed. (MD-Measured Depth, TVD-Vertical Depth)

State which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

This well is completed for separate production from more than one zone (multiple-zone completion), so state in the correct space and show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the zone reported in the blanks under PRODUCTION. Submit a separate completion report on this form for each interval (zone) to be separately produced.

"Backs Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORRO INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURE, AND RECOVERING				GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Canyon Springs	1100	1130	Canyon Springs-wet	Morrison	578	
Converse Sands	1715	1886		Sundance	751	
2nd Leo	2280	2325	Converse Sands-wet	Spearfish	1130	
				Goose Egg	1364	
			DST #1-2nd Leo, 2287'-2307'	Minnekahta	1604	
			IF: 5 min., IFP: 436-436	Minnelusa	1712	
			ISI: 30 min., ISIP: 973	Red Shale Marker	2158	
			FF: 60 min., FFP: 432-877	Second Leo	2287	
			FSI: 120 min., FSIP: 973	Atoka	2524	
			Opened with 2" blow, died 8 min. after ISI. Second open 2" blow, continued; died 1 min. after FSI. Rec. 180' muddy wtr., 1860' water. BHT-103F: Sample $R_w=1.9$ @ 80F 2700 ppm chlorides.			

(iv) Cement must be circulated to fill at least a 100-foot interval, of which at least 50 feet must be above the shoe of the surface casing; and

(v) A cement plug must be set at the surface as prescribed by the secretary;

(b) Wells without production casing:

(i) All aquifers, salt zones, and fluid-bearing formations must be sealed or separated with individual cement plugs, circulated to fill at least 100 feet of hole. Each individual cement plug must be at least 50 feet above the top of the following formations, as specified by the secretary;

- | | |
|--------------------------|-------------------------|
| (A) Fort Union Group | (H) Sundance Formation |
| (B) Hell Creek Formation | (I) Minnelusa Formation |
| (C) Fox Hill Formation | (J) Madison Formation |
| (D) Niobrara Formation | (K) Interlake Formation |
| (E) Greenhorn Formation | (L) Red River Formation |
| (F) Newcastle Sandstone | (M) Deadwood Formation |
| (G) Inyan Kara Group | |

(ii) Cement must be circulated to fill at least a 100-foot interval, of which at least 50 feet must be above the shoe of the surface casing; and

(iii) A cement plug must be set at the surface as prescribed by the secretary;

(c) Conversion of a well to a water well:

(i) When a test hole may safely be used by the landowner as a potential freshwater well, the operator must follow the plugging procedures set forth in this section to the base of the objective freshwater strata, if applicable. The surface owner must give a signed release to the operator before the conversion is made;

(ii) The well must then be constructed to meet specifications established in article 74:02.

Source: SL 1975, ch 16, § 1; transferred from § 52:02:04:02, effective July 1, 1979; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 50, effective October 4, 1987.

General Authority: SDCL 45-9-13.

Law Implemented: SDCL 45-9-11, 45-9-15.

74:10:04:03. Temporary abandonment of a well. Written approval must be obtained from the secretary for the temporary abandonment of a well. A well that is not completed with production casing may not be temporarily abandoned and must be plugged immediately. A well with production casing may not be temporarily abandoned for more than six months, unless the operator is granted an extension by the secretary.

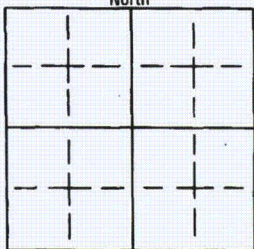
10-85

Section SE 1/4 SE 1/4 Sec 12 Twp 7 Rg 1

Fall River

W

North



1 mile

Well Completion Date JUNE 12 1988

☐ Domestic ☐ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☒ Stock

Rotary Air + Mud

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER		FROM		TO		HOLE DIAMETER
SC 4200	LB/FT	5 IN	0 FT	520 FT	7 7/8 IN		
	LB/FT	IN	FT	FT			
	LB/FT	IN	FT	FT			
	LB/FT	IN	FT	FT			

To what depth? 280 FT FEET

Describe grouting procedure TREM, LINE

What was grout weight? 1 BAG 7 GAL LB/GAL

Other information

Bottom Screen

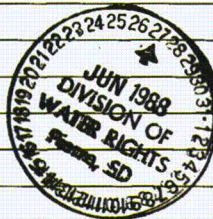
Laboratory sent to

Name LESLIE COATS

Address Dewey RT. Edgemont, T.D. 57735

Well Log:	Depth
-----------	-------

Formation	From	To
FALL RIVER	0	180
LAKOTA	180	530
MORRISON	530	540



STATIC WATER LEVEL 0 Feet

If flowing: closed in pressure 2 PSI

GPM flow 5000 through 1 GAL 10 MIN inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other

If other, specify

Can well be completely shut in? YES

☐ Pumped Air Bailed

☒ Bailed Describe: 10 GPM

☐ Other

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped: _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS:

3 GPM MEASURED AT 320

\therefore 6 cm measured from

500 ft SAND.

This well was drilled under license # 415

And this report is true and accurate.

Drilling firm KABEY Drilling + Exp

Signature of License Representative: _____

Russell Rakey

Signature of Well Owner: _____

Date _____

7-6-88

7-2-22c

SCHEDULED
RECORD OF SAMPLE DETERMINATIONS

Fall River Co

1

SW 22

7 S

2 E

R. G. Robinson

1

Fall River Co

South Dakota

SAMPLE FROM 0 - 170

LOCATION

FROM

TO

Sundance formation

- | | | |
|-----|-----|---|
| 0 | 150 | Clay, pale greenish gray, sandy |
| 150 | 154 | Sandstone, fine, rounded, white; with few large frosted quartz grains |
| 154 | 170 | Sandstone, fine, rounded, white to orange; few large orange and white frosted quartz grains |

2 with 4/29
acc to geol. map
(Edgemont NE), Sundance
is Fall River formation

So lg interp. or all loc is wrong