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1962

Papers Concerning Logan Water Works; Well Reports

Dean F. Peterson
Utah State University

Alvin A. Bishop
Utah State University

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36- L No- 6

20" Well for

Logan City, Utah

Located at Canyon Rd. & Crockett Ave.

July 11, 1962 8:00 - 6:30

Put shim on bit joint and tighten

0' - 4' Gravel fill

4' - 10' Muddy Silt

Seepage Water

10' - 15' Silt & Gravel Seepage of Water

15' - 18' Silt Gravel No water

18- 20' Clay Brown

July 12 7:00 - 5:30

20' - 25' " "

Set in casing

25' - 30' " "

Welded on casing 2 hours

30' - 35' " "

35' - 40' " "

40' - 45' " "

July 13 7:00 - 5:30

45' - 50' Gray Sand Clay

Welded on casing

50' - 55' " " "

2 Hours

55' - 60' " " "

60' - 65' " " "

July 16 7:00 - 6:30

65' - 75' " " "

Welding casing 2 hours

75' - 80' " " "

80' - 82' " " "

82' - 84' Gravel & silt

84' - 85' Clay & gravel

July 17 7:00 - 5:30

Welded on casing 2 hrs.

85' - 90' Clay and Gravel

90' - 92' " "

92' - 95' Silt & gravel hard.

95' - 100' " " "

102' 6"
Static
Water
Level

July 18 7:00 - 5:30

Welded casing 2 hours

100' - 105' Hard Silt & Gravel

Stand Up

105' 110' " "

110' - 112' " "

July 19 7:00

112' - 115 Hard silt & gravel

115' - 120' " " "

July 20 7:00 2:30 Welded on

beam and drilled 7 ft.

120' - 123 " " "

123' - 126 " " "

126' - 132' Light brown clay & rock

132' - 140' from clay and gravel

140' - 153' Brown sandy clay Gravel

153' - 161' Brown sandy clay small gravel

161' - 169' Brown clay

169' - 172' Sandy Clay & gravel

172' - 179' silt

179' - 182' Sandy clay & dark rock

182' - 186' Sandy clay

186' - 196' Sandy clay & gravel

196' - 207' Sandy clay & sediment

207' - 211' Gravel very little water

Top of 16"
Casing
200' ± "

Seepage

211' - 226' Hard compact rock & clay
Appears to be limestone

226' - 235' gray hard rock & clay

235' - 246 clay few rock

Bottom 20" casing

(247 - 10)

246' - 260' softer brown mud & rock

Sept. 25 7:00 - 5:30
Welded on casing 1 1/2 hours

269' - 284' Hard rock
284' - 285' Soft clay
285' - 287' Broken hard rock & clay
287' - 290' Light color hard sands
290' - 295' Silt & gravel
295' - 300' " "
300' - 303' " "

Sept. 26 7:00 - 5:30
Water raised from
135' to 114'

306'

303' - 306' Clay & Gravel
306' - 310' Washed gravel & sand
Some water

Sept. 27 7:00 - 5:30

Perforated
Water Good
305'
330'

Welded on casing Drove
4 feet ahead
310' - 315' Pea gravel good water
315' - 320' Coarse gravel & water

Sept. 28 7:00 - 5:30

322'

Hard to drive pipe through
320' - 322' " "

327

322' - 325' Silt & gravel seepage water
325' - 327' " " "

Oct. 1 7:00 - 5:30
Welded casing 1 1/2 hours

327' - 330' Hard Silt & Gravel No water
330' - 335' " " " "

Oct. 2 7:00 - 5:30

337' - 339' Hard Silt & Gravel

339' - 345' Gummy clay

345' - 350' " "

350' - 355' Silty Clay

355' - 360' Gummy "

360' - 365' " "

365' - 370' " "

370' - 375' " "

375' - 377' Silty Clay

377' - 380' Gummy "

380' - 384' " "

384' - 388' Broken Reck

388' - 390' Hard silt & gravel

Welded on casing & drove through
reck.

390' - 395' Hard Silt & gravel

395' - 398' " " "

398' - 400' Hard silt clay and gravel

400' - 405' " " " "

405' - 410' " " " "

410' - 415' Hard Silt Clay & Gravel

Oct. 3 7:00 - 5:30

Oct. 4 7:00 - 5:30

Oct. 5 7:00 - 5:30

Oct. 8 7:00 - 5:30

Welded on bit 2 hours and

Casing 1 1/2 hours

Perforated
410' - 415'

Oct 9 7:00 - 5:30

Busted drill line went
to Salt Lake and got one

415' - 416' Hard silt clay gravel

416'

Oct. 10 7:00 - 5:30

Put on new drill line

1500 feet of 1" Started drilling

3:30

water
420'

415' - 420' Washed gravel some water

Oct. 11 7:00 - 5:30

Welded on casing 2 hours

420' - 425' " "

Oct. 12 7:00 5:30

Dressed bit 2 Hours

425' 430' Very hard gravel

Oct. 15 8:00 - 6:30

Dressed bit

430' - 435' " " "

435' - 437' " " "

Oct. 16 7:00 - 5:30

437' - 440' " " "

440' - 445' " " "

Oct. 17 7:00 - 5:30

Welded on two joints
of pipe Drove down
Cleaned hole out.

445' - 450' " " "

Oct. 18 7:00 - 5:30

Perforated
450' 415'

450' - 454' Clay & gravel

454' - 465' Silty clay

Oct 19 7:00 - 5:30

465' 467' Silty clay

467' 470' Sandy clay

470' 475' " "

475' 480' " "

480' 485' " "

485' 490' " "

Oct. 22 8:00 - 6:30

490' 495' Sandy & gummy clay

495' 500' " "

500' 504'

Oct 23 7:00 - 5:30

504' 510' Clay & gravel

510' - 515 Hard "

Perforated
525' - 510'

Oct. 24 7:00 - 5:30

515' - 520' " "

520' - 524' " "

524' - 530' Gummy clay

Get tools stuck

Get loose

Oct 25 7:00 - 5:30

5:30' - 535' " "

535' - 540' " "

540' - 545' " "

Oct 26 7:00 - 5:30

545' - 550' " "

Welded spade on
bit 4 hours

Top of 12"
casing
554'

550' - 555' " "

Oct. 29 8:00 - 6:30

Welded on casing

Oct. 30 7:00 - 5:30

Welded casing

Oct. 31 7:00 - 5:30

Nov. 1 7:00 - 5:30

Nov. 2 7:00 - 5:30

Nov. 5 8:00 - 6:30

Dressed Bit 4 hours

Nov. 6 7:00 - 5:30

Welded on casing

Nov. 7 7:00 - 5:30

Bottom 16" casing
(614" 1")

555' - 560' Gummy clay

560' - 565' " "

565' - 570' Sandy clay

570' - 575' " "

575' - 580' " "

580' - 585' " "

585' - 588' " "

588' - 590' Hard Silt & gravel

and boulders

590' - 595' " " " "

595' - 600' " " " "

600' - 605' " " " "

605' - 608' " " " "

608' - 612' " " " "

612' - 615' " "

615' - 620' " "

620' - 625' " "

Drove pipe bent shoe

625' - 628' "

Sand coming in under pipe bottom

Nov. 27	7:00 - 5:30
Nov. 28	7:00 - 5:30
Nov. 29	7:00 - 5:30
Nov. 30	7:00 - 5:30
Dec. 3	8:00 - 6:30
Dec. 4	7:00 - 5:30
Dec. 5	7:00 - 5:30
Dec 6	7:00 - 5:30
Dec. 7	7:00 - 5:30

Finished running in 12" casing	
Hole filled in to 618 feet. with sand. Got hole cleaned out to bottom (628')	
628' - 630'	Hard Gravel
630' - 635'	" "
635' - 637'	" "
637' - 640'	" "
640' - 645'	" "
645' - 650'	" "
Put on drive head welded on casing	
650' - 655'	" "
655' - 660'	" "
660' - 665'	" "
665' - 670'	Ran out of sand line clamped 20 feet more on
670' - 675'	" "
675' - 680'	Some clay streaks
680' - 685'	" " "

Perforated 650' 685'

Dec. 10	8:30 - 7:00		Got New Sand Line
			Gene Spliced it on I run his rig
			Came Back cleaned out hole
Dec. 11	7:00 - 5:30		685' - 686' Hard Tough Gravel
			Welded on casing
			686' - 688 Washed Gravel & Water
		water	
		686	
Dec. 12	7:00 - 5:30	to	688' - 690' " " "
			690' - 695' " " "
		708'	
Dec. 13	7:00 - 5:30		695' - 700' " "
			700' - 705' " "
		685'	
Dec. 14	7:00 - 5:30		705' - 708' " "
			708' - 710' Silt Gravel & Boulders
			710' - 715' " " " "
Dec. 17	8:00 - 5:30		715' - 720' Hard Gravel Cemented
			720' - 722' " " "
Dec. 18	8:00 - 5:30		722' - 725' " " "
			725' - 729' " " "
Dec. 19	8:00 - 5:30		729' - 730' " " "
			730' - 735' " " " "
Dec. 20	8:00 - 5:30		

water
686
to
708'

685'
Perforated as per Perf. order
735'

Dec. 21 8:00 - 5:30

Dec. 26 8:00 - 5:30

Dec. 27 8:00 - 5:30

Dec. 28 8:00 - 5:30

Jan 2, 1963

Jan 3 8:00 - 5:30
Welded on casing
and drove down

Jan 4 8:00 - 5:30

Jan 5 8:00 - 5:30

Jan 7 8:00 - 5:30

Jan 8 8:00 - 5:30

Perforated as Perforating
order

750' -- 735'

735' - 740' Hard Cemented Gravel

740' - 742' " " "

742' - 745' " " "

745' - 750' " " "

750' - 755' " Clay "

755' - 756' " "

756' - 757' Hard Gravel

757' - 760' " "

760' - 763' Clay & Boulders

763' - 765' " "

765' - 770' " "

770' - 775' Clay & Boulders

775' - 777' Hard Gravel

777' - 780' " " "

780' - 783' " "

783' - 785' " "

785' - 788' Gummy Clay

788' - 789' Hard Gravel

789' - 790' " "

790' - 794' " "

794' - 800' " "

Jan. 9	8:00 - 5:30
Jan. 10	8:00 - 5:30
Jan 11	8:00 - 5:30
Jan 14	8:00 - 5:30
Jan. 15	8:00 - 5:30
Jan. 16	8:00 - 5:30
Jan 17	8:00 - 5:30
Jan 18	8:00 - 5:30
Jan 21	8:00 - 5:30
Welded on two joints	
pipe	
Jan. 22	8:00 - 5:30
Jan 23	8:00 - 5:30
Jan. 24	8:00 - 5:30

Perforated as per perforating order

830'

865'

800' - 805'	Hard Cemented Gravel
805' - 807'	" " "
807' - 810'	" " "
810' - 815'	" " "
815' - 820'	Clay
820' - 825'	Hard Cemented Gravel
825' - 830'	" " "
830' - 835'	" " "
835' - 837'	" " "
837' - 840'	" " "
840' - 845'	" " "
845' - 848'	Caveing some
848' - 850'	Loose Gravel & Silt
850' - 852'	Loose Gravel & silt
852' - 855'	Cemented Gravel
855' - 860'	" " "
860' - 865'	" " "

865'

Perforated
as per
perforating
order

Jan. 28 8:00 - 5:30

865' 870' Silt & Gravel

Jan. 29 8:00 - 5:30

870' - 875' " "

Welded on casing

Jan. 30 8:00 - 5:30

880'

825' - 880' " "

Dressed bit

880' - 882' " "

Jan. 31 8:00 - 5:30

882' - 885' " "

885' - 887' " "

Feb. 1 8:00 - 5:30

887' - 890' " "

Welded on casing

890' - 892' " "

Feb. 4 8:00 - 5:30

892 - 895' Cemented Gravel

Dressed bit

Feb. 5 8:00 - 5:30

895' - 898' " "

Feb. 6 8:00 - 5:30

898' - 900' Clay & Gravel

900' - 905' " "

905' - 910' " "

Feb. 7 8:00 - 5:30

910' - 915' " "

915' - 917' " "

Feb. 8 8:00 - 5:30

917' - 920' " "

920' - 925' " "

Feb. 11, 1963
 Welded on 16" casing
 and drove down
 Feb. 12, 1963
 Made new loop for
 top of baler
 Welded on bit 2 hours
 Feb. 13, 1963
 Welded on bit 2 hours
 Feb. 14, 1963
 4 hours welding on casing and
 bit, driving casing.
 Feb. 15, 1963

 Feb. 18, 1963
 3 hours welding 1 hour Dr. casing
 Feb. 19, 1963

 Feb. 20, 1963
 Tore down tools. Put in 90'
 perforator pipe
 Feb. 21, 1963
 Put in 855' perforator pipe and
 perforated 80' of hole
 doubled back casing line.

925'

Perforated
 as per
 Perforating
 order

945'

Bottom 12" casing 962' 2"

925'

 925' - 390 Clay Gravel & coarse sand
 930' - 932' " " " "

 932' - 935' " " " "
 935' - 940' " " " "
 940' - 945 Clay gravel coarse sand hard

 945' - 950 " " " Sticky
 950' - 955 " " " "
 955' - 959' " " " "
 959' - 960' " " " "
 960' - 965' " " " "
 965' - 970' " " " "
 970' - 975' " " " "
 975' - 978' " " " "

Feb. 22, 1963

Perforated 100' of hole

Started cutting of casing and broke bolt in perforator.

Pulled out of hole

Feb. 25, 1963

Put in 550' perforator

Pipe cut off 12" casing

Pulled casing loose on dead side cable jumped off shive 1 hour getting cable back over shive pulled out 550' of perf.

Feb. 26, 1963

Pulled out 554' of 12" casing

Feb. 27, 1963

Took off 12" perforator

put on 16" "

Feb. 28, 1963

Put in 525' of perforated 16" casing 2 hours cutting off casing

March 1, 1963

Finished cutting off 16" casing and pulled casing out 200' 4"

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on 6/19/62
Analysis Authorized by
Howard M. Hurst

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

Bacteriological
Col. SPC.

SAMPLE COLLECTED FROM: (check one)
Stream Spring Well
City or Town water distribution system
Other (describe) _____

Feb 8 4/5
" 20 5/5
June 11 5/5
" 13 3/5
Aug 6 0/5 - 4
" 13 0/5
" 20 0/5 - 11
Sept 4 0/5 - 0
" 29 0/5
" 31 0/5
" 19 0/5
" 17 0/5

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) _____

7th North and 6th East

STATE ENGINEER'S APPLICATION OR CLAIM NO. 32885

SUPPLY OWNED BY: Logan City

PRESENT USE OF SUPPLY: Not used

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: R. L. Stephens DATE: June 15, 1962

REPORT RESULTS TO: Logan City Health Dept.

Address: 230 North Main St., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity	<u>44</u>	Turbidity Units	
Conductivity	<u>419</u>	microhos/cm	
pH	<u>7.9</u>		
Total Dissolved Solids	<u>235</u>	mg/l	
Alkalinity(total) as CaCO ₃	<u>196</u>	mg/l	
Aluminum as Al		mg/l	
Arsenic as As	<u>0.00</u>	mg/l	
Barium as Ba		mg/l	
Bicarbonate as HCO ₃	<u>237</u>	mg/l	
Boron as B	<u>0.09</u>	mg/l	
Cadmium as Cd		mg/l	
Calcium as Ca	<u>52</u>	mg/l	
Carbonate as CO ₃	<u>1.0</u>	mg/l	
Chloride as Cl	<u>8</u>	mg/l	
Chromium(hexavalent) as Cr	<u>0.00</u>	mg/l	
Copper as Cu		mg/l	
Cyanide as CN		mg/l	
Fluoride as F	<u>0.23</u>	mg/l	
Hardness(total) as CaCO ₃	<u>214</u>	mg/l	
Hydroxide as OH	<u>0.01</u>	mg/l	

Iron (total) as Fe	<u>4.35</u>	mg/l
Iron in filtered sample as Fe	<u>0.02</u>	mg/l
Lead as Pb	<u>0.00</u>	mg/l
Magnesium as Mg	<u>21</u>	mg/l
Manganese as Mn	<u>0.06</u>	mg/l
Nitrate as NO ₃	<u>0.57</u>	mg/l
Phosphate as PO ₄	<u>1.6</u>	mg/l
Phenols as Phenol		mg/l
Potassium as K	<u>1.4</u>	mg/l
Selenium as Se		mg/l
Silica as SiO ₂	<u>740</u>	mg/l
Silver as Ag		mg/l
Sodium as Na	<u>5</u>	mg/l
Sulfate as SO ₄	<u>12</u>	mg/l
Surfactant as ABS		mg/l
Zinc as Zn		mg/l
Suspended alpha		uuc/l
Dissolved alpha		uuc/l
Suspended beta		uuc/l
Dissolved beta		uuc/l

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on 2/23/62
Analysis Authorized by
Edward M. Hurd

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)

Stream

Spring

Well

City or Town water distribution system

Other (describe) _____

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) _____

How well located on corner of 7th North 6th East

STATE ENGINEER'S APPLICATION OR CLAIM NO. 12285

SUPPLY OWNED BY: Logan City

PRESENT USE OF SUPPLY: Not being used

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: R. L. Stephens DATE: Feb. 23, 1962

REPORT RESULTS TO: R. L. Stephens, Logan City Health Department

Address: 250 North Main Street, Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity	<u>0.0</u>	Turbidity Units		Iron (total) as Fe	<u>0.92</u>	mg/l
Conductivity	<u>400</u>	micromhos/cm		Iron in filtered sample	<u>0.02</u>	mg/l
pH		<u>8.2</u>		Lead as Pb	<u>0.00</u>	mg/l
Total Dissolved Solids		<u>236</u>	mg/l	Magnesium as Mg	<u>15</u>	mg/l
Alkalinity (total) as CaCO ₃		<u>196</u>	mg/l	Manganese as Mn	<u>0.00</u>	mg/l
Aluminum as Al			mg/l	Nitrate as NO ₃	<u>0.35</u>	mg/l
Arsenic as As		<u>0.01</u>	mg/l	Phosphate as PO ₄	<u>0.00</u>	mg/l
Barium as Ba			mg/l	Phenols as Phenol		mg/l
Bicarbonate as HCO ₃		<u>235</u>	mg/l	Potassium as K	<u>1.0</u>	mg/l
Boron as B		<u>0.06</u>	mg/l	Selenium as Se		mg/l
Cadmium as Cd			mg/l	Silica as SiO ₂	<u>6.8</u>	mg/l
Calcium as Ca		<u>62</u>	mg/l	Silver as Ag		mg/l
Carbonate as CO ₃		<u>2.0</u>	mg/l	Sodium as Na	<u>4.6</u>	mg/l
Chloride as Cl		<u>5</u>	mg/l	Sulfate as SO ₄	<u>19</u>	mg/l
Chromium (hexavalent) as Cr		<u>0.00</u>	mg/l	Surfactant as ABS		mg/l
Copper as Cu		<u>0.00</u>	mg/l	Zinc as Zn	<u>0.00</u>	mg/l
Cyanide as CN			mg/l	Suspended alpha		uuc/l
Fluoride as F		<u>0.08</u>	mg/l	Dissolved alpha		uuc/l
Hardness (total) as CaCO ₃		<u>214</u>	mg/l	Suspended beta		uuc/l
Hydroxide as OH		<u>0.03</u>	mg/l	Dissolved beta		uuc/l

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on _____
Analysis Authorized by
Howard M. Hurst

WATER SAMPLE FOR CHEMICAL ANALYSIS (Partial)
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)

Stream Spring Well
City or Town water distribution system
Other (describe) _____

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) New Well

7th North & 6th East

STATE ENGINEER'S APPLICATION OR CLAIM NO. 12005

SUPPLY OWNED BY: Logan City

PRESENT USE OF SUPPLY: Irrigation

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: E. L. Stephens DATE: Sept. 4, 1962

REPORT RESULTS TO: Logan City Health Dept.

Address: 200 North Main St., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity <u>1.0</u>	Turbidity Units	Iron (total) as Fe	<u>0.18</u> mg/l
Conductivity <u>403</u>	micromhos/cm	Iron in filtered sample	_____ mg/l
pH	<u>8.1</u>	Lead as Pb as Fe	_____ mg/l
Total Dissolved Solids	_____ mg/l	Magnesium as Mg	_____ mg/l
Alkalinity (total) as CaCO ₃	_____ mg/l	Manganese as Mn	_____ mg/l
Aluminum as Al	_____ mg/l	Nitrate as NO ₃	_____ mg/l
Arsenic as As	_____ mg/l	Phosphate as PO ₄	_____ mg/l
Barium as Ba	_____ mg/l	Phenols as Phenol	_____ mg/l
Bicarbonate as HCO ₃	_____ mg/l	Potassium as K	_____ mg/l
Boron as B	_____ mg/l	Selenium as Se	_____ mg/l
Cadmium as Cd	_____ mg/l	Silica as SiO ₂	_____ mg/l
Calcium as Ca	_____ mg/l	Silver as Ag	_____ mg/l
Carbonate as CO ₃	_____ mg/l	Sodium as Na	_____ mg/l
Chloride as Cl	_____ mg/l	Sulfate as SO ₄	_____ mg/l
Chromium (hexavalent) as Cr	_____ mg/l	Surfactant as ABS	_____ mg/l
Copper as Cu	_____ mg/l	Zinc as Zn	_____ mg/l
Cyanide as CN	_____ mg/l	Suspended alpha	_____ uuc/l
Fluoride as F	_____ mg/l	Dissolved alpha	_____ uuc/l
Hardness (total) as CaCO ₃	_____ mg/l	Suspended beta	_____ uuc/l
Hydroxide as OH	_____ mg/l	Dissolved beta	_____ uuc/l

PLEASE NOTE: Sample cannot be analyzed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on 6/19/62
Analysis Authorized by
Howard M. Hurst

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)

Stream

Spring

Well

City or Town water distribution system

Other (describe) _____

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) _____

7th North and 6th East

STATE ENGINEER'S APPLICATION OR CLAIM NO. 32885

SUPPLY OWNED BY: Logan City

PRESENT USE OF SUPPLY: Not used

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: R. L. Stephens

DATE: June 15, 1962

REPORT RESULTS TO: Logan City Health Dept.

Address: 230 North Main St., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity <u>44</u>	Turbidity Units	Iron (total) as Fe	<u>4.35</u> mg/l
Conductivity <u>119</u>	microhos/cm	Iron in filtered sample	<u>0.02</u> mg/l
pH	<u>7.9</u>	Lead as Pb as Fe	<u>0.00</u> mg/l
Total Dissolved Solids	<u>235</u> mg/l	Magnesium as Mg	<u>21</u> mg/l
Alkalinity (total) as CaCO ₃	<u>196</u> mg/l	Manganese as Mn	<u>0.06</u> mg/l
Aluminum as Al	_____ mg/l	Nitrate as NO ₃	<u>0.57</u> mg/l
Arsenic as As	<u>0.00</u> mg/l	Phosphate as PO ₄	<u>1.6</u> mg/l
Barium as Ba	_____ mg/l	Phenols as Phenol	_____ mg/l
Bicarbonate as HCO ₃	<u>237</u> mg/l	Potassium as K	<u>1.4</u> mg/l
Boron as B	<u>0.09</u> mg/l	Selenium as Se	_____ mg/l
Cadmium as Cd	_____ mg/l	Silica as SiO ₂	<u>790</u> mg/l
Calcium as Ca	<u>52</u> mg/l	Silver as Ag	_____ mg/l
Carbonate as CO ₃	<u>1.0</u> mg/l	Sodium as Na	<u>5</u> mg/l
Chloride as Cl	<u>8</u> mg/l	Sulfate as SO ₄	<u>12</u> mg/l
Chromium (hexavalent) as Cr	<u>0.00</u> mg/l	Surfactant as ABS	_____ mg/l
Copper as Cu	_____ mg/l	Zinc as Zn	_____ mg/l
Cyanide as CN	_____ mg/l	Suspended alpha	_____ uuc/l
Fluoride as F	<u>0.23</u> mg/l	Dissolved alpha	_____ uuc/l
Hardness (total) as CaCO ₃	<u>214</u> mg/l	Suspended beta	_____ uuc/l
Hydroxide as OH	<u>0.01</u> mg/l	Dissolved beta	_____ uuc/l

LOGAN CITY, UTAH

CENTER ST. AND CANYON RD.

DRILLER: GENE

Started Setting Up Rig

Finished setting up rig - Spudded in.

0' 1' Topsoil

1' 8' Gravel - Silt - Sand

5' 10' " " "

10' 14' " " " coble

14' 20' " " Water off top

20' 25' Sand - Silt - Clay Blue Gray

25' 30' " " " "

30' 35' " " " "

35' 40' " " " "

40' 45' " " " "

45' 50' " " " "

Water Lev.

50' 55' " " " "

55' 60' Silt Clay

60' 65' " "

65' 70' " "

70' 75' " "

75' 80' " "

80' 85' " "

85' 90' Sand Silt Pieces of Wood

Methane Gas

90' 94' Sand Silt Wood Gas

94' 100' Gravel Silt Cobles Water

100' - 105' " Sand " Water good

June 18, 1962

June 19, 8:00 - 6:30

June 20, 7:00 - 5:30

Welded Shoe on casing

June 21 7:00 - 5:30

Finished Setting Up Tool

Shack to Rig

June 22 7:00 - 5:30

Hauled Casing From 10th North

June 25 8:00 - 6:30

June 26 7:00 - 5:30

Water standing 66'

June 27 7:00 - 5:30

105' - 110' Gravel Sand Cobles "

110' - 115' " " "

115' - 120' " " "

June 28 7:00 - 5:30

120' - 125' " " "

125' - 130' " " "

130' - 132' Gravel " "

June 29 2:00 - 5:30

132' - 138' Gravel Silt Sand Fair

138' - 140' " " "

140' - 145' " " "

145' - 150' " " "

150' - 153' " " "

July 2 8:00 - 6:30

153' - 157' Silt - Pea Gravel "

Welded crack in stem

157' - 161' Gravel - Silt "

July 3 7:00 - 5:30

161' - 165' Silt Brown

165' - 170' " "

170' - 175' " "

175' - 180' " "

180' - 185' " "

185' - 187' " "

July 4 7:00 - 5:30

187' - 190' Clay - Blue

190' - 195' " "

195' - 198' " "

July 5 7:00 - 5:30

198' - 205' Gravel Sand Silt poor ^{standing Water} 77'

Welded and poured on rig "

July 6 7:00 - 5:30

205' - 210' Gravel - Sand - Silt "

July 9 7:30 - 6:00

210' - 215' " " Standing "

215' - 220' " " " "

July 10 7:00

220' - 225' " " " "

225' - 230' " " " "

230' - 235' " " " "

July 11	7:00 - 5:30	235° - 240°	Gravel - Sand- Silt Water poor
		240° - 245°	" " " "
July 12	7:00 - 5:30	245° - 250°	" " " "
		250° - 255°	" " " "
July 13	7:00 - 5:30	255° - 260°	" " (Standing " ")
		260° - 265°	" " " "
July 16	8:00 - 6:00	265° - 270°	" " " "
July 17	7:00 - 5:30	270° - 275°	" " " "
July 18	7:00 - 5:30	275° - 280°	" " " "
		280° - 285°	" " " "
July 19	7:00 - 5:30	285° - 290°	" " " "
		290° - 293°	" " " "
July 20	7:00 - 5:30	293° - 295°	" " " "
		295° - 300°	" " " "
		300° - 302°	" " " "
July 23	7:00 - 5:30	302° - 305°	" " " "
		305° - 310°	" " " "
		310° - 315°	" " " "
July 25	8:00 - 6:30	315° - 320°	Gravel - Cobles - Sand Silt "
July 26	7:00 - 5:30	320° - 325°	" " " " "
July 27	7:00 - 5:30	325° - 330°	" " " "
July 30	8:00 - 6:30	330° - 333°	" " " "
July 31	7:00 - 5:30	333° - 338°	" " " Standing
Aug. 1	7:00 - 5:30	338° - 342°	" " " "
Aug. 2	7:00 - 5:30	342° - 347°	" " " "
Aug. 3	7:00 - 5:30	347° - 352°	" " " "
Aug. 6	8:00 - 6:30	352° - 357°	" " " "
Aug. 7	7:00 - 5:30	357° - 360°	" " " "
		360° - 362°	Clay Brown Gummy

Aug. 8 7:00 - 5:30

Aug. 9 7:00 - 5:30

Aug. 10 7:00 - 5:30

Aug. 13 8:00 - 6:30

Aug. 14 7:00 - 5:30

Aug. 15 7:00 - 5:30

Aug. 16 7:00 - 5:30

Aug. 17 7:00 - 5:30

Aug. 20 8:00 - 6:30

Aug. 21 7:00 - 5:30

Aug. 22 7:00 - 5:30

Aug. 23 7:00 - 5:30

Aug. 24 7:00 - 5:30

Aug. 27 8:00 - 6:30

Aug. 28

Aug. 29

Aug. 30

Aug. 31

Sept. 5

Sept. 6

Sept. 7

Sept. 8

Sept. 10

Sept. 11

Sept. 12

Sept. 13

Sept. 14

Top 16"

Bottom 20"

4

362' - 365' Clay Pea Gravel

365' - 370' " "

370' - 373' " "

373' - 375' Gravel Sand Silt Water poor

375' - 380' " " " "

380' - 385' " " " "

385' - 390' " " " " Standing

390' - 395' " " " " " Water Level

395' - 400' " " " " " 54'

400' - 405' " " " " " "

405' - 410' " " " " " "

410' - 415' " " " " " "

415' - 420' " " " " " "

420' - 425' " " " " " "

425' - 430' " " " " " "

430' - 435' " " " " " "

435' - 440' " " " " " "

440' - 445' " " " " " "

445' - 450' " " " " " "

450' - 455' " " " " " "

455' - 460' " " " " " "

460' - 465' " " " " " "

465' - 470' " " " " " "

Ran 16" Casings

" " "

" " "

" " "

" " "

470' - 478' Gravel Sand Silt

478' - 486' " " "

Sept. 17	8:15 - 6:45
Sept. 18	7:00 - 5:30
Sept. 19	7:00 - 5:30
Set Socket	
Sept 20	7:00 - 5:30
Sept. 21	7:00 - 5:30
Sept. 24	8:00 - 6:30
Sept 25	7:00 - 5:30
Sept 26	7:00 - 5:30
Sept 27	7:00 - 5:30
Welded on casing	
Set Socket - Broken Strand	
Sept. 28	7:00 - 5:30
Oct. 1	8:00 - 6:30
Oct. 2	7:00 - 5:30
Oct. 3	7:00 - 5:30
Oct. 4	7:00 - 5:30
Oct. 5	7:00 - 5:30
Oct. 8	8:00 - 6:30

485

Perforated

530

486' - 490'	Gravel Sand	Same Water
490' - 492'	" "	Standing Water 82'
492' - 498'	" " "	"
498' - 502'	" " "	"
502' - 510'	" " "	"
510' - 516'	" " "	"
516' - 522'	" " "	"
522' - 526'	" " "	"
526' - 529'	" " Silt	No Water
529' - 537'	" " "	"
537' - 539'	" " "	"
539' - 541'	" " "	"
541' - 545'	Sand Silt Clay	
545' - 550'	Silt - Clay	
550' - 555'	" "	
555' - 560'	Clay Gumbo	
560' - 565'	" "	
565' - 570'	" "	
570' - 575'	" "	
575' - 580'	" Sand Silt	
580' - 582'	" " Water Level	65'
582' - 588'		
588' - 592'	Gravel silt Standing	
592' - 595'	" "	
595' - 600'	" " "	
600' - 605'	" " "	
605' - 610'	" "	
610' - 615'	" " "	

Oct. 9	7:00 - 5:30
Oct. 10	7:00 - 5:30
Oct. 11	7:00 - 5:30
Oct. 12	7:00 - 5:30
Oct. 15	8:00 - 5:30
Oct. 16	7:00 - 5:30
Oct. 17	7:00 - 5:30
Oct. 18	7:00 - 5:30
Changed drill lines	
Oct. 19	7:00 - 5:30
Oct. 22	8:00 - 6:30
Oct. 23	7:00 - 5:30
Oct. 24	7:00 - 5:30
Oct. 25	7:00 - 5:30
Oct. 26	7:00 - 5:30
Oct. 26	
Oct. 29	7:00 - 5:30
Oct. 30	7:00 - 5:30
Oct. 31	7:00 - 5:30
Nov. 1	7:00 - 5:30
Nov. 2	7:00 - 5:30
Nov. 5	8:00 - 6:30

Perforated

Perforated 635' - 835'

615' - 618'	Gravel Silt Standing
618' - 620'	" Cobles Silt "
620' - 625'	" " " "
625' - 630'	" Silt Sand "
630' - 634'	" " " "
634' - 638'	" " " "
638' - 640'	" Sand Carving Water
640' - 645'	" " Water good
645' - 650'	" Silt " poor
650' - 655'	" " " "
655' - 656'	" " " "
656' - 660'	Sand Water Good
660' - 662'	" "
662' - 666'	" Silt Water Poor
666' - 671'	" Water good
671' - 675'	" " Silt Water poor
675' - 680'	" " " "
680' - 685'	" " " "
685' - 690'	" " " "
690' - 695'	" " " "
695' - 696'	" " " "
696' - 700'	" " Water good
700' - 705'	" " " "
705' - 710'	" " Water fair
710' - 714'	" " " "
714' - 720'	" " Boulders "
720' - 725'	" " " "
725' - 728'	" " " "

Nov. 6
 Nov. 7
 Nov. 8
 Nov. 9
 Nov. 12
 Nov. 13
 Nov. 14
 Nov. 15
 Nov. 16
 Nov. 19
 Nov. 20
 Nov. 21
 Nov. 22
 Nov. 23
 Nov. 24
 Nov. 25
 Nov. 26
 Nov. 29
 Nov. 30
 Dec. 3
 Dec. 4
 Dec. 5
 Dec. 6
 Dec. 7
 Dec. 10
 Dec. 11

Perforated
 Perforated
 Perforated 835' - 635'

728' - 732'	Gravel Sand Silt Water poor
732' - 735'	" " " "
735' - 739'	" " " "
739' - 743'	" " " "
743' - 748'	" " " "
748' - 752'	" " " "
752' - 754'	" " Water Fair
754' - 758'	" " " "
758' - 760'	" Boulders " Poor
760' - 764'	" " " "
764' - 768'	" " " "
768' - 772'	" " " "
772' - 778'	" " " "
778' - 783'	" " " "
783' - 785'	Gravel Sand Silt Standing
788' - 792'	" " " "
792' - 796'	" " " "
796' - 800'	" " " "
800' - 803'	" " " "
803' - 807'	" " " "
807' - 808'	" " " "
808' - 810'	" " Water good
810' - 814'	" " " "
814' - 820'	" Silt standing poor
820' - 825'	" " " "
825' - 830'	" " " "
830' - 835'	" " " "
835' - 838'	Conglomerate
838' - 840	Gravel Sand Silt
840' - 845'	" " " "

Dec. 12

Dec. 13

Dec. 14

Dec. 17

Dec. 18

Dec. 19

Dec. 20

Dec. 21

Dec. 26

Dec. 27

Dec. 28

Jan. 2

Jan. 3

Jan. 4.

Jan. 5

Jan. 7

Jan. 8

Jan. 9

Jan. 10

Jan. 11

Jan. 14

Jan. 15

Jan. 16

Jan. 17

Jan. 18

Jan. 21

Jan. 22

Jan 23 Yard Repair

Jan. 24

Jan. 25

Jan. 28

845' - 850'	Gravel	Sand	Silt	Standing
850' - 855'	"	"	"	"
855' - 860'	"	"	"	"
860' - 865'	"	"	"	"
865' - 870'	"	"	"	"
870' - 875'	"	"	"	"
875' - 878'	"	"	"	"
878' - 880'	"	"	"	"
880' - 881	"	"	"	"
Back caving hard, getting casing down				
881' 882'	Gravel	Sand	Silt	Standing
882' - 885'	"	"	"	"
885' - 889'	"	"	"	"
889' - 892'	"	"	"	"
892' - 900'	"	"	"	"
900' - 905'	"	"	"	"
905' - 910'	"	"	"	"
910' - 915'	"	"	"	"
915' - 920'	"	"	"	"
920' - 925'	"	"	"	"
925' - 929'	"	"	"	"
929' - 932'	"	"	"	"
932' - 938'	"	"	"	"
938' - 943'	"	"	"	"
943' - 948'	"	"	"	"
948' - 950'	"	"	"	"
950' - 952'	"	"	"	"
952' - 955'	"	"	"	"

Jan. 29

Jan. 30

Jan. 31

Feb. 1

Feb. 4

Feb. 5

Feb. 6

Feb. 7

Feb. 8

Bottom
16" casing

open
hole

957' - 960' Gravel Sand Silt Standing

960' - 965' " " " "

965' - 970' " " " "

970' - 975' " " " "

975' - 980' " " " "

980' - 985' " " " "

985' - 990' " " " "

990' - 995' " " " "

995' - 1000' " " " "

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

PAGE 1
DATE JAN. 23, 1963

ORDER NO. _____

CUSTOMER LOGAN CITY

ADDRESS _____

WELL LOCATION 10TH NORTH

DISCH. PIPE _____

Total Pump Setting 200' PERFORATED AREAS _____

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

STATIC LEVEL 61' TOP CASING BOWL USED 1 1/2"

TIME	GUAGE IN FEET	G.P.M.	PUMPING LEVEL	DEVIATION	DISC. P.P.M.	PUMP P.P.M.	TEMP.	REMARKS
JAN 22								
10:30 AM			109'			1200	58°	6" ORIFICE
11:30 AM			114'			1200	58°	DIRTY CLAY & SILT
12:30 AM.			114'			1800	58°	" " "
1:30 PM	53"		114'			1800	58°	" " "
2:30 PM	53"		114'			1200	58°	" " "
3:30 PM	53"		114'			1200	58°	" " "
4:30 PM	53"		114'			1200	58°	" " "
4:45 PM	66'		114'6			1350	58°	" " "
5:30 PM	68"		114'6			1350	58°	" " "
6:30 PM	68"		116'			1350	58°	" " "
7:30 PM	66"		115'			1350	58°	" " "

HOURS PUMPED THIS DAY _____
HOURS PUMPED TO DATE _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC. WATER IS CLEARING SILENT & SAND

TESTED BY _____

DATE JAN 23, 1963

ORDER NO. _____

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH No

WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 1 1/2" ORifice DIA 6" STATIC LEVEL 61'

WELL DEPTH _____ Casing I. D. _____

Total Pump Setting 200 PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	BAROMETER	WOB. P.P.M.	PUMP P.P.M.	WATER TEMP	REMARKS
8:30 PM	74"	1200 APPROX	114' 6"	53 1/2'	1350	1350	58°	MILKY SLIT FINE
9:30 PM	74"	1200	114' 6"	53 1/2'	1350	1350	58°	" " "
10:30 PM	74"	1200	115' 0"	54'	1350	1350	58°	" " "
11:30 PM	74"	1200	110' 6"	50 1/2'	1350	1350	58°	FINE SLIT
12:30 AM	74"	1200	112' 0"	52'	1350	1350	58°	MILKY SLIT
1:30 AM	74"	1200	114' 0"	53'	1350	1350	58°	MILKY (SLIT) CLEARING SOME
2:30 AM	74"	1200	114' 0"	53'	1350	1350	58°	" " FINE SLIT
3:30 AM	74"	1200	115' 0"	54'	1350	1350	58°	FINE SLIT
4:30 AM	74"	1200	115' 0"	54'	1350	1350	58°	FINE SLIT
5:30 AM	74"	1200	114' 6"	53 1/2'	1350	1350	58°	FINE SLIT
6:30 AM	74"	1200	115' 0"	54'	1350	1350	58°	SLIT CLEARING SOME
7:30 AM	74"	1200	115' 0"	54'	1350	1350	58°	SLIT MILKY

REMARKS ON SAND, CASING, PLUMB OF WELL ETC.

HOURS PUMPED THIS DAY _____
 HOURS PUMPED TO DATE _____

TESTED BY _____

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN 24, 1963

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ CASING I. D. _____

ADDRESS _____

WELL DEPTH _____ CASING I. D. _____

WELL LOCATION 10TH NORTH

TOTAL WELL DEPTH _____

DISCH. PIPE 1 1/2" ORIFICE DIA. 6 TO 10

STATIC LEVEL 61' BOWL USED 1 1/4"

Total Pump Setting 200 PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. G.P.M.	PUMP E.P.M.	TEMP	REMARKS
8:30	74	1200	110'	50'	1350	1350	58°	MILKY SLT
9:30	74	1200	114'	53'	1350	1350	58°	" "
10:30	74	1200	114	53'	1350	1350	58°	" "
11:30	74	1200	110	49'	1350	1350	58°	" "
12:30	74	1200	114	53'	1350	1350	58°	" "
1:30	ABOVE SCALE		114' 6"	53' 6"	1350	1350	58°	" " FINE
2:30	ABOVE SCALE		114' 6"	53' 6"	1350	1350	58°	" "
3:30		CEASED	PUMPING	TO CHANGE ORIFICE FROM				
4:30		STARTED	PUMPING	ON 10"	ORIFICE	1350	5	6" TO 10"
4:30	6 1/2	1250	114' 6"	53' 6"	1350	1350	58°	PUR ON 10" ORIFICE
5:30	6 1/2	1250	114' 6"	53' 6"	1350	1350	58°	QUITE DIRTY WITH
6:30	6 1/2	1250	119' 6"	53' 6"	1350	1350	58°	CLAY + SLT

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

WELL STILL PUMPING QUITE A BIT OF

CLAY + SLT

TESTED BY _____

HOURS PUMPED TO DATE _____

HOURS PUMPED THIS DAY _____

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE JAN. 24, 1963

ORDER NO. _____

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH NORTH

WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 12" ORIFICE DIA 10" STATIC LEVEL 61' BOWL USED 14"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	Gauge in inches	G.P.M.	PUMPING LEVEL	BEAVERDOWN	ENG. G.P.M.	PUMP G.P.M.	TEMP.	REMARKS
7:30 PM	7"	1300	114' 6"	53' 6"	1350	1350	58°	CLAY-SILT-FINE
8:30 PM	7"	1300	114' 6"	53' 6"	1350	1350	58°	
9:30 PM	9"	1480	151' 4"	90' 4"	1500	1500	58°	
10:30 PM	9"	1480	151' 6"	90' 6"	1500	1500	58°	
11:30 PM	9"	1480	151' 6"	90' 6"	1500	1500	58°	
12:30 AM	9"	1480	148' 0"	87' 0"	1500	1500	58°	
1:30 AM	9"	1480	147' 10"	86' 10"	1500	1500	56°	
2:30 AM	9"	1480	148' 0"	87' 0"	1500	1500	56°	
3:30 AM	9"	1480	148' 0"	87' 0"	1500	1500	56°	
4:30 AM	9"	1480	147' 10"	86' 10"	1500	1500	56°	
5:30 AM	9"	1480	146' 10"	85' 10"	1500	1500	55°	
6:30 AM	9"	1480	147' 5"	86' 5"	1500	1500	55°	

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN. 25, 1963

ORDER NO. _____

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____ WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH NORTH TOTAL WELL DEPTH _____

DISCH. PIPE 12" ORIFICE DIA. 10" STATIC LEVEL 61' BOWL USED 14"

Total Pump Setting 200 PERFORATED AREAS _____

TIME	GUAGE IN INCHES	G.P.M.	PUMPS LEVEL	DOWNHOLE	DR. G.P.M.	PUMP G.P.M.	TEMP.	REMARKS
7:30 AM	9"	1480	147'0"	86'0"	1500	1500	56°	SILT + SANDY
8:30 AM	9"	1480	146'6"	85'6"	1500	1500	56°	" "
9:30 AM	9"	1480	146'6"	85'6"	1500	1500	58°	" "
10:30 AM	9"	1480	147'	86'	1500	1500	58°	" "
11:30 AM	9"	1480	147'	86'	1500	1500	58°	" "
12:30 P.M.	9"	1480	146'	85'	1500	1500	58°	" "
1:30 P.M.	9 1/4"	1500	145'	84'	1500	1500	58°	" "
2:30 P.M.	9 1/4"	1500	145'	84'	1500	1500	58°	" "
3:30 P.M.	9 1/4"	1520	143'	82'	1500	1500	58°	" "
4:30 P.M.	9 1/4"	1520	141'	80'	1500	1500	58°	" "
5:30 P.M.	9 1/4"	1520	144'	83'	1500	1500	58°	" "
6:30 P.M.	9 1/4"	1520	143'	82'	1500	1500	58°	" "

HOURS PUMPED THIS DAY _____ STOPPED PUMPING AT 7:15 P.M. REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN 28, 1963

ORDER NO. _____

CUSTOMER CITY OF LOGAN

ADDRESS _____

WELL LOCATION 10TH NORTH

DISCH. PIPE 12" ORIFICE DIA 10"

Total Pump Setting 200 PERFORATED AREAS _____

WELL DEPTH _____ Casing I. D. _____
 WELL DEPTH _____ Casing I. D. _____
 TOTAL WELL DEPTH _____
 STATIC LEVEL 61' BOWL USED 14'

TIME	GAUGE IN FEET	G.P.M.	PUMPING LEVEL	BARROWN	DEW. P.P.M.	PUMP P.P.M.	TEMP.	REMARKS
7:30 P.M.	9 1/2"	1520	138'	77'	1500	1500	58°	STARTED PUMPING
8:30 P.M.	9 1/2"	1520	138'	77'	1500	1500	58°	SAND & SILT
9:30 P.M.	9 1/2"	1520	138'	77'	1500	1500	58°	"
10:30 P.M.	9 1/2"	1520	138'	77'	1500	1500	58°	"
11:30 P.M.	9 1/2"	1520	138'	77'	1500	1500	58°	"
12:30 A.M.	9 1/2"	1520	138'	77'	1500	1500	58°	"
1:30 A.M.	9 1/2"	1520	138'	77'	1500	1500	58°	"
2:30 A.M.	9 1/2"	1520	138' 6"	77' 6"	1500	1500	56°	"
3:30 A.M.	9 1/2"	1520	138' 2"	77' 2"	1500	1500	56°	"
4:30 A.M.	9 1/2"	1520	139' 0"	78' 0"	1500	1500	56°	"
5:30 A.M.	9 1/2"	1520	139' 0"	78' 0"	1500	1500	56°	"
6:30 A.M.	9 1/2"	1520	139' 2"	78' 2"	1500	1500	56°	"

HOURS PUMPED THIS DAY _____
 HOURS PUMPED TO DATE _____

TESTED BY _____

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN 29 - 63

ORDER NO. _____

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH NORTH

WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 12"

ORIFICE DIA 10"

STATIC LEVEL 61'

BOWL USED 14"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	GANGES IN INCHES	G.P.M.	PUMPING LEVEL	DOWNHOLE	ENG. R.P.M.	PUMP R.P.M.	TEMP.	REMARKS
7:30 AM	9 1/2"	1520	139' 1"	78' 1"	1500	1500	57°	SAND + SILT
8:30 AM	9 1/4"	1520	139'	78'	1500	1500	58°	" "
9:30 AM	9 1/4"	1520	138'	77'	1500	1500	58°	" "
10:30 AM	9 1/4"	1520	138' 6"	77' 6"	1500	1500	58°	" "
11:30 AM	9 1/4"	1520	138'	77'	1500	1500	58°	" "
12:30 AM	9 1/4"	1520	138	77'	1500	1500	58°	" "
1:30 PM	14 1/2"	1875	168	107'	1360	1700	58°	" "
2:30 PM	14 1/2"	1875	172	111'	1360	1700	58°	" "
3:30 PM	14 1/2"	1875	173	112'	1360	1700	58°	" "
4:30 PM	14 1/2"	1875	173	112'	1360	1700	58°	" "
5:30 PM	14 1/2"	1875	173' 6"	112' 6"	1360	1700	58°	" "
6:30 PM	14 1/2"	1875	170' 6"	109' 6"	1360	1700	58°	" "

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN 29, 1963

ORDER NO. _____

CUSTOMER CITY OF LOGAN

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH NORTH

TOTAL WELL DEPTH _____

DISCH. PIPE 1 1/2" ORIFICE DIA 10"

STATIC LEVEL 61 BOWL USED 14"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	DEPTH IN FEET	G.P.M.	PUMPING LEVEL	BARDOWN	ENG. P.P.M.	PUMP P.P.M.	TEMP.	REMARKS
7:30 PM	14 1/2"	1875	169	108	1360	1700	58°	CLEANING SORE SANDY
8:30 PM	14 1/2"	1875	169	108	1360	1700	58°	PUMPING 1 TO 30 SAND & SILT
9:30 PM	14 3/4"	1885	170	109	1360	1700	58°	SANDY
10:30 PM	14 1/2"	1875	170	109	1360	1700	58°	
11:30 PM	14 1/2"	1875	170	109	1360	1700	57°	
12:30 P.M.	14 3/4"	1885	170	109	1360	1700	57°	
1:30 P.M.	14 1/2"	1875	169	108	1360	1700	56°	
2:30 P.M.	14 1/2"	1875	170	109	1360	1700	56°	
3:30 P.M.	14 1/2"	1875	170	109	1360	1700	56°	
4:30 A.M.	14 1/2"	1875	170	109	1360	1700	56°	
5:30 A.M.	14 1/2"	1875	170	109	1360	1700	56°	
6:30 A.M.	15 1/4"	1905	183	122	1440	1800	56°	SAND + SILT

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____
 HOURS PUMPED TO DATE _____
 TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Jan 30, 1963

ORDER NO. _____

CUSTOMER City of Logan

Contractors

WELL DEPTH _____ Casing I. D. _____
 WELL DEPTH _____ Casing I. D. _____
 TOTAL WELL DEPTH _____

ADDRESS _____

WELL LOCATION 10 1/4 North

DISCH. PIPE 12" QUINCE DIA. 10" STATIC LEVEL 1161' BOWL USED 14"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	GAGES IN HOLE	G.P.M.	PUMPING LEVEL	DOWNHOLE	ENG. G.P.M.	PUMP U.P.M.	TEMP.	REMARKS
7:30 AM	15 1/4"	1405	186' 9"	125' 9"	1440	1800	56°	SAND + SILT
8:30 AM	16"	1970	188'-6"	127' 6"	1440	1800	58°	" "
9:30 AM	16"	1970	190'-6"	129' 6"	1440	1800	58°	CLEARING SOME SAND
10:30 AM	16"	1970	190'-6"	129' 6"	1440	1800	58°	" "
11:30 AM	18 1/2"	2118	193'	132'	1500	1875	58°	" "
12:30 PM	18"	2089	195' 6"	134' 6"	1500	1875	58°	" "
1:30 PM	17 1/2"	2060	194'-6"	133' 6"	1500	1875	58°	" "
2:30 PM	17 1/2"	2060	194'-6"	133' 6"	1500	1875	58°	" "
3:30 PM	17 1/2"	2060	194'-6"	133' 6"	1500	1875	58°	" "
4:30 PM	17 1/2"	2060	194'	133'	1500	1875	58°	" "
5:30 PM	17 1/2"	2060	194'	133'	1500	1875	58°	" "
6:30 PM	17 1/4"	2040	194'	133'	1500	1875	58°	SANDY S TO 45'

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE Jan 30, 63

ORDER NO. _____

CUSTOMER City of Logan

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10th North

TOTAL WELL DEPTH _____

DISCH. PIPE 12" ORIFICE DIA 10" STATIC LEVEL 1161' BOWL USED 14"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	Gauge in inches	O.P.M.	PUMPED LEVEL	DOWNHOLE	DEP. D.P.M.	PUMP U.P.M.	Temp	REMARKS
7:30 PM	17" 9/16"	2030	194' 6"	133' 6"	1500	1875	58°	Light silt - some sand
8:30 PM	17" 9/16"	2030	194' 6"	133' 6"	1500	1875	58°	" " " "
9:30 PM	16 3/4"	2015	195' 1"	134'	1500	1875	58°	" " " "
10:30 PM	17"	2030	195'	134'	1500	1875	58°	" " " "
11:30 PM	17"	2030	195'	134'	1500	1875	57°	" " " "
12:30 AM	16 3/4"	2015	194' 10"	133' 10"	1500	1875	56°	" " " "
1:30 AM	16 3/4"	2015	195'	134'	1500	1875	56°	" " " "
2:30 AM	16 3/4"	2015	195'	134'	1500	1875	55°	" " " "
3:30 AM	16 3/4"	2015	194' 10"	133' 10"	1500	1875	55°	" " " "
4:30 AM	16 3/4"	2015	195'	134'	1500	1875	56°	" " " "
5:30 AM	16 3/4"	2015	195'	134'	1500	1875	56°	" " " "
6:30 AM	16 3/4"	2015	195'	134'	1500	1875	56°	" " " "

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Jan 31, 1963

ORDER NO. _____

CUSTOMER City of Logan

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 18th North

WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 12 ORIFICE DIA 1 1/2" STATIC LEVEL 611' BOWL USED 14"

Total Pump Setting 200 PERFORATED AREAS _____

TIME	ORIFICE IN HOLES	G.P.M.	PUMPING LEVEL	SHUTDOWN	ENG. G.P.M.	PUMP G.P.M.	REMARKS
7:30 AM	16" Surging	1920	194' 9"	133' 9"	1500	1825	(temp) Casing
8:30 AM	16 1/2"	2000	194' 6"	133' 6"	1500	1875	light silt & sand
9:30 AM	16 1/2"	2000	195' 1"	134' 1"	1500	1875	" "
10:30 AM	16 1/2"	2000	195' 1"	134' 1"	1500	1875	" "
11:30 AM	17 1/2"	2060	193' 1"	132' 1"	1500	1875	" "
12:30 PM	17 1/2"	2060	190' 1"	129' 1"	1500	1875	Back surge of fluid
1:30 PM	17 1/2"	2060	192' 1"	131' 1"	1500	1875	10 parts sand to 450 water
2:30 PM	17"	2030	192' 1"	131' 1"	1500	1875	Back surge of fluid
3:30 PM	17"	2030	193' 1"	132' 1"	1500	1875	Back surge of fluid
4:30 PM	17 1/2"	2000	194' 6"	133' 6"	1500	1875	Back surge of fluid
5:30 PM	17 1/2"	2060	190' 6"	129' 6"	1500	1875	Back surge of fluid
6:30 PM	18 1/2" Surging	2118 (approx)	194' 1"	133' 1"	1520	1900	Back surge of fluid

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

Min. Necessary for Recovery
 2:35 PM 20' Rec 2:55 pm 64'
 2:40 PM 68' 3:00 pm 63'
 2:45 PM 68' 3:05 pm 62'
 2:50 PM 65' 3:10 pm 61'
 3:15 pm 61'

Notes: Total Time needed 45 min for recovery

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Jan 31, 1963
 ORDER NO. _____

CUSTOMER City of Logan

ADDRESS _____ WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10th North WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 12" ORIFICE DIA. 10" TOTAL WELL DEPTH _____

Total Pump Setting 200' PERFORATED AREAS _____ STATIC LEVEL 61' BOWL USED 14"

TIME	GAUGE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	INL. G.P.M.	PLUM. G.P.M.	(Temp)	REMARKS
2:30	17" (varying)	2030	193'	132'	1520	1900	58°	Light Brown Sand
8:00	lost							
9:30	9 1/2"	1520	130'	69'	1200	1500	58°	
9:30	9 1/2"	1520	128' 6"	47' 6"	1200	1500	58°	
10:30	9 1/2"	1520	128' 0"	47' 0"	1200	1500	58°	
11:30	9 1/2"	1520	126' 0"	65' 0"	1200	1500	58°	
12:30 A.M.	9 1/2"	1520	126' 4"	65' 4"	1200	1500	55°	
1:30 A.M.	9 1/2"	1520	126' 0"	65'	1200	1500	55°	
2:30 A.M.	9"	1480	126' 6"	65' 6"	1200	1500	56°	
3:30 A.M.	9"	1480	126' 0"	65'	1200	1500	56°	
4:30	9"	1480	126' 4"	65' 4"	1200	1500	56°	
5:30	9"	1480	126' 4"	65' 4"	1200	1500	56°	

REMARKS ON SAND CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____
 HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE FEB 1, 63
 ORDER NO. _____

CUSTOMER CITY OF LASAN
 ADDRESS _____
 WELL LOCATION 10TH NORTH
 DISC. PIPE 1 1/2" ORIFICE DIA. _____
 TOTAL Pump Setting 200' PERFORATED AREAS _____
 STATIC LEVEL 61' BOWL USED 14"
 WELLS DEPTH _____ CASING I. D. _____
 WELL DEPTH _____ CASING I. D. _____
 TOTAL WELL DEPTH _____

TIME	GUAGE IN INCHES	G.P.M.	PUMPING LEVEL	BEAVERDEN	DIS. E.P.M.	PUMP E.P.M.	TEMP.	REMARKS
6:30 AM	9"	1480	121' 0"	63'	1200	1800	(56°)	
7:30 AM	8 1/2"	1420	120' 3"	59' 3"	1160	1450	(56°)	
8:00 AM	10 1/2"	1600	121' 6"	60' 6"	1500	1500	58°	SANDY

HOURS PUMPED THIS DAY _____
 HOURS PUMPED TO DATE _____
 TESTED BY _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Feb 25-63

ORDER NO _____

CUSTOMER CITY OF LOGAN
ADDRESS CENTER ST & Canyon Rd.

WELL DEPTH 1000' Casing I. D. 16"

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

STATIC LEVEL 55' Top of Casing Used 18"

DISCH. PIPE 12" ORIFICE DIA. 10"

PERFORATED AREAS 425'-530'

WELL LOCATION _____

Total Pump Setting 200'

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	BEAUBORN	SPG. S.P.M.	PUMP S.P.M.	REMARKS
13:00 N.	14	1845	85	30'	1000	1200	(Temp) 60°
12:30 P	10	1560	96.75	21:75	900	900	
1:30 P	11	1635	76.5	21:5	900	900	
2:00 P	15	1905	84	29'	1000	1000	
3:00 P	15	1905	85.5	28:5	1000	1000	
3:30 P	16	1970	84	29'	1000	1000	
4:00 P	16	1970	84	29'	1000	1000	
5:30 P	16.5	2000	80.75	27.25	1000	1000	Too heavy - silt 5/400
7:00 P	17	2030	82.5	27.5	1000	1000	" " 2/400
8:00 P	17	2030	82	27	1000	1000	" " 1/400
9:00 P	17	2030	82	27	1000	1000	" " TRACE
9:15 P	22	2316	87.95	32.75	1050	1050	" " 3/400

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Feb 25-63

ORDER NO. _____

CUSTOMER City of Logan

WELL DEPTH 1000

Casing I. D. 16"

ADDRESS Logan Utah

WELL DEPTH _____

Casing I. D. _____

WELL LOCATION Center St + Cassady Rd

WELL DEPTH _____

Casing I. D. _____

DISCH. PIPE 12"

ORIFICE DIA. 10"

TOTAL WELL DEPTH 1000

STATIC LEVEL 55

BOWL USED 18"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	GAGES IN FEET	G.P.M.	PUMPING LEVEL	BEAVERDOWN	ENG. P.P.M.	PUMP P.P.M.	REMARKS
10:00 P	22.50	2343	88.50	33.50	10.50	10.50	FIN GRAY SILT 2/400
10:30 P	22.50	2343	88.50	33.50	10.50	10.50	" " 2/400
11:00 P	22.50	2343	88.50	33.50	10.50	10.50	" " 2/400
11:30 P	22.50	2343	88.50	33.50	10.50	10.50	" " 1/400
12:00 A	22.50	2343	88.50	33.50	10.50	10.50	" (Temp 57°) " 1/400
12:15 P			56.25				
Platform covered in Shut off pump 12:15							
Mr. R. Clark Butcher 7415 VETTING TIND 56.25							

HOURS PUMPED THIS DAY _____

REMARKS ON SAND, CASING, PLUMBS OF WELL, ETC.

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 26 Feb 1963

ORDER NO. _____

CUSTOMER City of Sogar

ADDRESS Open Road

WELL LOCATION Center St & Canyon Rd

DISCH. PIPE 12"

ORIFICE DIA 10"

WELL DEPTH _____

WELL DEPTH _____

Casing I. D. _____

Casing I. D. _____

Casing I. D. _____

Total Pump Setting 200'

PERFORATED AREAS _____

STATIC LEVEL 55'

BOWL USED 18"

TIME	Gauging in Feet	G.P.M.	Pumping Level	Barometer	Well S.P.M.	Pump S.P.M.	REMARKS
9:00 P	20	8204	79	24	1000	1000	STARTED Pumping
5:00 P	24	2409	83.5	28.5	1050	1050	DRY GEAR SUIT 1/400
6:00 P	24	2409	83.5	28.5	1050	1050	3/400
7:00 P	24.5	2435	83.7	28.7	1050	1050	4/400
8:00 P	23.5	2550	90.0	35.0	1050	1050	5/400
11:00 P	39	2650	83	27	1200	1200	7/400
1:00 A	36.5	2980	86.5	31.5	1175	1145	7/400
2:00 A	26.5	2539	80.5	25.5	1200	1200	5% pump not somehow down
3:00 A	28.5	2630	79.8	22.8	1350	1350	"
3:30 A	36.0	2964	83.5	28.5	1350 (OD)	1350	"
4:00 A	36.5	2980	83.5	28.5	1350	1350	" (Water Temp 57°)

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC. Dirt (Saddle Gravel)

TESTED BY _____

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Feb 27 63

ORDER NO. _____

CUSTOMER City of Logansport
ADDRESS Logansport, Ind

WELL DEPTH _____ Casing I. D. _____
WELL DEPTH _____ Casing I. D. _____
WELL DEPTH _____ Casing I. D. _____

WELL LOCATION Centerville Center Rd

TOTAL WELL DEPTH 1000'

DISCH. PIPE 12" ORifice DIA 10" STATIC LEVEL 55' BOWL USED 18"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	QUANTITY IN RECORDS	G.P.M.	PUMPING LEVEL	BAROMETRIC	REQ. G.P.M.	PUMP G.P.M.	TEMP	REMARKS
5:00 P	36.0	2964	80.0'	25.0	00	1350	TEMP	44.00
6:00 P	36.5	2980	82.0'	27.0	00	1350	57' (SMAKING) SAND	50%
7:00 P	38.5	3068	82.5'	27.5	0.0	1350	56" SAND 1/400	"
8:00 P	38.5	3068	81.0'	26.0	0.0	1350	58" coarse Sand (50%)	"
9:00 P	46	3334	88.5'	28.5	0.0	1350	58" the very salt water	3/400
10:00 P	44.5	3280	82	27		1350	"	3/400
11:00 P	45.5	3316	82	27		1350	"	3/400
12:00 P	44.5	3280	81.25	26.25		1350	"	1/400
1:00 P	44.5	3280	81.25	26.25		1350	"	1/400
2:00 P	44.5	3280	81.25	26.25		1350	"	1/400
3:00 P	44.5	3280	81.25	26.25		1350	"	1/400
4:15 P	64	3990	90.00	35.00	15.00	1500	"	3/400

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE Feb. 27 - 1966

ORDER NO _____

CUSTOMER City of Pocatello
ADDRESS Pocatello Idaho
WELL LOCATION East on 22nd Canyon Rd.
DISCH. PIPE 12"

WELL DEPTH _____ Casing I.D. _____
WELL DEPTH _____ Casing I.D. _____
TOTAL WELL DEPTH 1000' Casing I.D. _____
STATIC LEVEL 55' BOWL USED 18"

Total Pump Setting 200' ORIFICE DIA 10" PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	HEADLOSS	WEL. L.P.M.	PUMP L.P.M.	REMARKS
5:00 P	62	3860	89	34	1500	1500	The casing is 2 1/4"
6:00 P	61	3830	89	34	1500	1500	" " " " " "
7:00 P	61	3830	89	34	1500	1500	" " " " " "
8:00 P	61	3830	89	34	1500	1500	" " " " " "
9:00 P	61	3830	88.5	33.5	1500	1500	" " " " " "
10:00 P	61	3860	89	34	1500	1500	" " " " " "
11:00 P	63	3890	88.5	33.5	1500	1500	" " " " " "
12:00 P	63	3890	89	34	1500	1500	" " " " " "
1:00 P	63	3890	89	34	1500	1500	" " " " " "
2:00 P	64	3920	90	35	1500	1500	" " " " " "
3:00 P	64	3920	90	35	1500	1500	" " " " " "
4:00 P	64	3920	90	35	1500	1500	" " " " " "
5:00 P	64	3920	90	35	1500	1500	" " " " " "

HOURS PUMPED THIS DAY _____

TESTED BY _____

REMARKS ON SAND, CASING, PLUMBS OF WELL, ETC.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

ORDER NO. _____

DATE Feb 28 63

CUSTOMER City of Logan
 ADDRESS Logan Utah
 WELL LOCATION Center St Canyon Rd
 DISCH. PIPE 12" ORIFICE DIA 10"
 Total Pump Setting 200 PERFORATED AREAS _____

WELL DEPTH _____ Casing I. D. _____
 WELL DEPTH _____ Casing I. D. _____
 WELL DEPTH _____ Casing I. D. _____
 TOTAL WELL DEPTH 1000'
 STATIC LEVEL 55' BOWL USED 18"

TIME	GUAGE IN INCHES	G.P.M.	PUMPING LEVEL	DOWNHOLE	ENG. R.P.M.	PUMP R.P.M.	REMARKS
5:00 A	64	3920	89	34	1500	1500	Fine Sand.
6:00 A	65	3950	90	35	1500	1500	" "
7:30 A	69	4070	90	35	1550	1550	Some sand 1/400
8:00 A	76	4275	93	38	1590	1590	Coarse sand 3/400
9:00 A	76	4274	93	38	1590	1590	" "
10:00 A	76	4274	92.5	37.5	1590	1590	8" W. sand silt 1/400
11:10 A	75	4245	92.25	37.25	1590	1590	" "
12:00 A	74	4216	92.25	37.25	1575	1575	" "
12:30 P	75	4248	92.25	37.25	1575	1575	" "
1:00 P	75	4245	89.5	34.5	1575	1575	Back case - 18" Turbines 3/400
2:00 P	74	4216	89.5	34.5	1575	1575	Tan sand silt 1/400
3:00 P	74	4216	89	34	1575	1575	" "
3:00 P	74	4216	89	34	1575	1575	Trace

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____
HOURS PUMPED TO DATE _____
TESTED BY _____

WELL TEST REPORT

ANDREW WELL DRILLING

Contractor

DATE: Feb 28 63

OFFICE NO. _____

OWNER Logan C. IV

ADDRESS _____
 LOCATION Candler St. - Caydon Rd.

DISCH. PWT 12' OFFICE DIA 10"

TOT. PWT; Setting 200' PROPOSED AREAS _____

WELL DEPTH _____

WELL T.D.P. _____

WELL DEPTH _____

TOTAL WELL DEPTH 1000'

STAIR LEVEL 55'

DOWN USED 18"

Casing I.D. _____

Casing I.D. _____

Casing I.D. _____

TIME	DEPTH TO BOTTOM OF HOLE	LOG	PROF. LOG	DEPTH TO TOP OF HOLE	DEPTH TO BOTTOM OF HOLE	DEPTH TO TOP OF HOLE	REMARKS
4:00 P	74	4246	89	34	1575	1525	Top sand - 11' - 12'
5:00 P	76.5	4288	89.75	34.75	1590	1590	" " " "
6:00 P	82	4446	88.85	37.25	1575	1575	" " " "
7:00 P	80.5	4404	92.5	37.5	1575	1575	" " " "
8:00 P	80.5	4404	92.5	37.5	1575	1575	" " " "
9:00 P	80.5	4444	92.0	37.0	1575	1575	" " " "
10:00 P	80	4390	91.5	36.5	1575	1575	" " " "
11:00 P	80	4390	91	36.0	1575	1575	" " " "
12:00 P	80	4390	91.5	36.5	1575	1575	" " " "
1:00 A	80.5	4404	91.5	36.5	1575	1575	" " " "
2:00 A	80.5	4404	91	36	1575	1575	" " " "
3:00 A	81	4418	91.5	36.5	1575	1575	" " " "

LOGS NUMBERED TO 3 DAY

REMARKS: ON SAND CASING CHANGE OF AB. ETC

TRACER

ISSUED FALLS, 1945

WELL TEST REPORT ANDREW WELL DRILLING

Contractors,

Date: March 1, 1963

ORDER NO. _____

CUSTOMER City of Logan
 ADDRESS Logan, Utah
 WELL LOCATION Basin Canyon Rd
 DRILL HOLE 12" CORNER ON 10"
 TOTAL PUMP SETTING 200' PERFORATED AREA _____

WELL DEPTH _____ CASING I. D. _____
 WELL DEPTH _____ CASING I. D. _____
 TOTAL WELL DEPTH 100.0 CASING I. D. _____
 STATIC LEVEL 55' PUMP USED B

TIME	DEPTH IN FEET	LOG	TEMPERATURE	WELL DEPTH	WELL DEPTH	WELL DEPTH	REMARKS
4:00 A	76.5	4288	91.5	36.5	1575	1575	Gray Sand (Good)
5:00 A	77.0	4303	91.0	36.0	1575	1575	" " " "
6:00 A	77.0	4303	90.0	35.0	1575	1575	" " " "
7:00 A	80.0	4390	91.5	36.5	1575	1575	YTHES (Good)
8:00 A	79.5	4376	91.0	36.0	1575	1575	" " " "
9:00 A	83	4471	90	35	1575	1575	SHOE S/LT (Good)
10:00 A	83	4474	90.5	35.5	1575	1575	" " " "
11:00 A	81	4418	89.0	34	1550	1550	" " " "
12:00 A	81	4418	89.0	34	1550	1550	" " " "
1:00 P	82	4446	88.0	33	1550	1550	" " " "
2:00 P	81	4418	87.25	32.25	1550	1550	" " " "
3:00 P	81	4418	87.25	32.25	1550	1550	" " " "

HOURS PUMPED THIS DAY _____

REMARKS ON SAND CASING PLUMBING, ETC.
 ALL FIGURES FROM 9:00 AM AND BEFORE BACK SIGHT
 EXCEPT ON SAND AND CASING. THE FIGURES AS BACK SIGHT
 AND THE BATTER AT THE

Edsco Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 1 March 1963

ORDER NO. _____

CUSTOMER _____

WELL DR. I.D. _____ Casing I.D. _____

ADDRESS _____

WELL DEPTH _____ Casing I.D. _____

WELL LOCATION _____

WELL DEPTH _____ Casing I.D. _____

DISCH. PIPE 12"

ORIFICE DIA. 10" STATE LEVEL 55' BOWL USED 18"

Total Pump Setting 240' PERFORATED AREA _____

TIME	GAUGE OR METER	ORA	PUMPED WATER	WATER LEVEL	WELL DEPTH	PUMP DEPTH	REMARKS
4:00	81	4418	87	32	1550	1550	SILT-SPUR
5:00	81	4418	87	32	1550	1550	" " "

SWIT OFF PUMP AT 5:00 PM. 1 MARCH 1963

INSTRUMENTS BY COMPANY BACK TO SR. ET.

HOURS PUMPED THIS DAY _____

REMARKS ON SAND, CASING, PUMP OR WELL, ETC.

CUSTOMER'S NAME _____

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

63 144
DO NOT WRITE HERE
Sample Received on 3/5/63
Analysis Authorized by
Howard M. Hurst

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)

Stream Spring Well

City or Town water distribution system

Other (describe) _____

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) _____

2nd East & Center St., Logan, Utah

STATE ENGINEER'S APPLICATION OR CLAIM NO. 32004

SUPPLY OWNED BY: Logan City Corporation

PRESENT USE OF SUPPLY: Now well

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: Roger Stephens DATE: 2/1/63

REPORT RESULTS TO: Roger Stephens

Address: 240 North Main St., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity <u>88</u>	Turbidity Units	Iron (total) as Fe	<u>4.27</u> mg/l
Conductivity <u>375</u>	micromhos/cm	Iron in filtered sample	<u>0.12</u> mg/l
pH	<u>8.15</u>	Lead as Pb as Fe	<u>0.00</u> mg/l
Total Dissolved Solids	<u>210</u> mg/l	Magnesium as Mg	<u>21</u> mg/l
Alkalinity (total) as CaCO ₃	<u>166</u> mg/l	Manganese as Mn	<u>0.00</u> mg/l
Aluminum as Al	_____ mg/l	Nitrate as NO ₃	<u>1.2</u> mg/l
Arsenic as As	<u>0.00</u> mg/l	Phosphate as PO ₄	<u>17.6</u> mg/l
Barium as Ba	_____ mg/l	Phenols as Phenol	_____ mg/l
Bicarbonate as HCO ₃	<u>197</u> mg/l	Potassium as K	<u>1.5</u> mg/l
Boron as B	<u>0.00</u> mg/l	Selenium as Se	_____ mg/l
Cadmium as Cd	_____ mg/l	Silica as SiO ₂	<u>9.0</u> mg/l
Calcium as Ca	<u>42</u> mg/l	Silver as Ag	_____ mg/l
Carbonate as CO ₃	<u>1.5</u> mg/l	Sodium as Na	<u>7.0</u> mg/l
Chloride as Cl	<u>8</u> mg/l	Sulfate as SO ₄	<u>9.0</u> mg/l
Chromium (hexavalent) as Cr	<u>0.00</u> mg/l	Surfactant as ABS	_____ mg/l
Copper as Cu	<u>0.00</u> mg/l	Zinc as Zn	<u>0.00</u> mg/l
Cyanide as CN	_____ mg/l	Suspended alpha	_____ uuc/l
Fluoride as F	_____ mg/l	Dissolved alpha	_____ uuc/l
Hardness (total) as CaCO ₃	<u>191</u> mg/l	Suspended beta	_____ uuc/l
Hydroxide as OH	<u>0.02</u> mg/l	Dissolved beta	_____ uuc/l

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 8/11/76

ORDER NO. _____

CUSTOMER CITY of Logan

ADDRESS _____

WELL LOCATION CANYON + CROOK ST

DISCH. PIPE 12"

Total Pump Setting 200'

ORIFICE DIA. 10'

PERFORATED AREAS _____

WELL DEPTH _____ Casing I. D. _____
WELL DEPTH _____ Casing I. D. _____
TOTAL WELL DEPTH _____
STATIC LEVEL 103' BOWL USED 18"

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DOWNCOM	DIS. L.P.M.	PUMP L.P.M.	REMARKS
10:30 AM	75	4245	115.75	12.75	1600	1600	STARTED Pumping
11:30 AM	69	4070	115	12	1550	1550	59' CLEAR
12:30 PM	77	4303	115.75	12.75	1650	1650	59' LINE SAND AND CLEAR
1:30 PM	82	4446	117	14	1700	1700	59'
2:36 PM	90	4685	118.25	15.25	1800	1800	59'
3:30 PM	89	4634	118.25	15.25	1800	1800	59'
4:30 PM	91	4685	118	15	1825	1825	
5:00 PM	Secured From pumping						

HOURS PUMPED THIS DAY _____
HOURS PUMPED TO DATE _____
TESTED BY _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

#2

WELL TEST REPORT

ANDREW WELL DRILLING Contractors

DATE 27 APR 1963

Idaho Falls, Idaho

ORDER NO _____

CUSTOMER City of Logan

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION Chryms & Brockett

WELL DEPTH _____ Casing I. D. _____

DISCH. PIPE 12" ORIFICE DIA 10" TOTAL WELL DEPTH _____ BOWL USED 18"

Total Pump Setting 200' PERFORATED AREAS _____

TIME	GUAGE IN INCHES	G.P.A.	PUMPING LEVEL	BEAVERDOWN	G.W. G.P.A.	PUMP G.P.A.	REMARKS
<u>8:30 AM</u>	<u>109.</u>	<u>5105</u>	<u>180'</u>	<u>17'</u>	<u>2000</u>	<u>2000</u>	<u>STARTED Pumping</u>
<u>9:30 AM</u>	<u>92</u>	<u>4710</u>	<u>119</u>	<u>16'</u>	<u>1850</u>	<u>1850</u>	<u>breakup streaky grey</u>
<u>9:45 AM</u>	<u>94.5</u>	<u>4600</u>	<u>119</u>				

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

REMARKS ON SAND, CASING, PLUGS OF WELL, ETC.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 11/15/65

ORDER NO. _____

CUSTOMER Togon City

WELL DEPTH 430 Casing I. D. 30"

ADDRESS Togon City

WELL DEPTH 380 Casing I. D. 16"

WELL LOCATION 102 North

WELL DEPTH 800 Casing I. D. _____

DISCH. PIPE 12"

ORIFICE DIA. 10" STATIC LEVEL 57'6" BOWL USED July 18"

Total Pump Setting 210' PERFORATED AREAS 480' to 500' 510' to 550' 602' to 610' 650' to 710'

TIME	ORIFICE IN INCHES	G.P.M.	PUMPS LEVEL	DRAWDOWN	DIS. L.P.M.	PUMP L.P.M.	REMARKS
17:00			80'0	22.4	900	900	Very Dirty 620'
18:30			73'0	15.4	850	850	" "
20:00			85'0	22.4	900	900	" "
21:30			85'0	27.4	900	900	" "
23:00			88'0	25.4	900	900	" "
24:00			82.6	25.0	900	900	" "
01:00			82.6	25.4	900	900	" "
02:00			83.0	25.4	900	900	" "
03:00			84.0	26.4	900	900	" "
04:00			84.6	27.0	900	900	" "
05:00			83.0	25.4	900	900	" "
06:00			82.0	24.4	900	900	" "

HOURS PUMPED THIS DAY 4
HOURS PUMPED TO DATE 14
TESTED BY DA & W.P. Cal

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.
Drilling a little sand & very

2

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 11-14-63

ORDER NO. _____

CUSTOMER Logan Co. Co.

WELL DEPTH 420' Casing I. D. 20"

ADDRESS Logan Well

WELL DEPTH 380' Casing I. D. 16"

WELL LOCATION 10th North

WELL DEPTH 800' Casing I. D. _____

DISCH PIPE 12" ORIFICE DIA 10" STATIC LEVEL 522.6 BOWL USED 305 18"

Total Pump Setting 210 PERFORATED AREAS 480-500' 540-560' 600-620' 680-720'

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
07:00			81'	23.4	900	900	VERY DIRTY 670
07:30							
09:00	2.5		104.6	47.0	1000	1000	" "
10:00			100.6	43.0	1000	1000	" "
11:00			101	43.4	1000	1000	" "
12:00			101	43.4	1000	1000	" "
14:00			100	42.4	1000	1000	" "
15:00			99.6	42.0	1000	1000	" "
16:00			98.6	41.0	1000	1000	" "
17:00			98.6	41.0	1000	1000	" "
18:00	5"	1106	109.1	51.5	1050	1050	Casing 50 RPM
19:00	5 1/2"	1150	109.5	51.9	1050	1050	Very dirty

HOURS PUMPED THIS DAY 12

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC

Very dirty

TESTED BY G.A. & D.A.

HOURS PUMPED TO DATE 26

3

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 14 NOV 1963

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER LEGAN CITY _____

ADDRESS _____

WELL LOCATION _____

ORIFICE DIA. 1 1/2"

DISCH PIPE 1 1/2"

PERFORATED AREAS 450 500

STATIC LEVEL 57.6

BOWL USED 15

WELL DEPTH 350

Casing I. D. 16

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
20:00	5 1/4"	1150	106.9	49.3	1050	1050	" " 67°
21:00	5 3/4"	1175	106.9	48.4	1050	1050	" " 67°
22:00	6 1/2"	1250	106.4	48.8	1050	1050	" " 67°
23:00	6 1/2"	1250	105.0	47.4	1050	1050	" " 67°
24:00	6 3/4"	1275	104.0	46.4	1050	1050	" " 67°
01:00	7"	1300	104.0	46.4	1050	1050	" " 67°
02:00	7"	1300	104.0	46.4	1050	1050	" " 67°
03:00	7"	1300	104.0	46.4	1050	1050	Water Chlorine 67°
04:00	7"	1300	104.0	46.4	1050	1050	" " 74°
05:00	7"	1300	104.0	46.4	1050	1050	" " 76°
06:00	7"	1300	104.0	46.4	1050	1050	" " 76°
07:00	8"	1400	107.0	49.5	1050	1050	Dirty-clearing

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 39

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELLS DRILLING

Contractors

DATE 15 Nov 1963
ORDER NO. _____

CUSTOMER _____

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE _____

Total Pump Setting _____

ORIFICE DIA _____

STATIC LEVEL _____

BOWL USED _____

WELL DEPTH _____

WELL DEPTH _____

WELL DEPTH _____

TOTAL WELL DEPTH _____

Casing I. D. _____

Casing I. D. _____

Casing I. D. _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
08:00	8	1400 ^{29.4}	105	47.6	1050	1050	Purity
09:00	8	1400 ^{29.4}	105	47.6	1050	1050	"
10:00	8	1400 ^{29.4}	105	47.6	1050	1050	"
11:00	8	1400 ³⁰	104	46.6	1050	1050	"
12:00	8	1400 ³⁰	104	46.6	1050	1050	"
12:30	10	1550 ^{27.3}	111.5	54.0	1100	1100	"
13:00	10.5	1600 ^{29.4}	112	54.5	1100	1100	"
14:00	11	1635 ^{30.7}	111.5	54.0	1100	1100	"
15:00	11	1635 ^{31.2}	110	52.5	1100	1100	"
16:00	11	1635 ^{31.2}	110	52.5	1100	1100	"
17:00	11.25	1650 ^{30.9}	111	53.5	1100	1100	"

HOURS PUMPED THIS DAY 10
HOURS PUMPED TO DATE 48

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

TESTED BY _____

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WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 11/16/63

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER Togan City

WELL DEPTH 420' Casing I.D. 20"

WELL DEPTH 380' Casing I.D. 18"

WELL DEPTH _____ Casing I.D. _____

ADDRESS Togan City

TOTAL WELL DEPTH 800'

WELL LOCATION 10th North

STATIC LEVEL 57.6' BOWL USED 3rd 18"

DISCH PIPE 12" ORIFICE DIA 10" PERFORATED AREAS 480' 500' 540' 560' 600' 620' 650' 720'

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
<u>19:00</u>	<u>11"</u>	<u>1635</u>	<u>114.0</u>	<u>56.6</u>	<u>1150</u>	<u>1150</u>	<u>Quite Dirty 67'</u>
<u>20:00</u>	<u>12"</u>	<u>1705</u>	<u>113.0</u>	<u>55.6</u>	<u>1150</u>	<u>1150</u>	<u>" " 670'</u>
<u>21:00</u>	<u>12"</u>	<u>1705</u>	<u>118.0</u>	<u>58.6</u>	<u>1150</u>	<u>1150</u>	<u>" " 670'</u>
<u>22:00</u>	<u>12"</u>	<u>1705</u>	<u>112.10</u>	<u>54.4</u>	<u>1150</u>	<u>1150</u>	<u>Clearing " 670'</u>
<u>23:00</u>	<u>12"</u>	<u>1705</u>	<u>112.9</u>	<u>54.3</u>	<u>1150</u>	<u>1150</u>	<u>" " 670'</u>
<u>23:00</u>	<u>12"</u>	<u>1705</u>	<u>112.9</u>	<u>54.3</u>	<u>1150</u>	<u>1150</u>	<u>" " 670'</u>

HOURS PUMPED THIS DAY 6

REMARKS ON SAND CASING PLUMB OF WELL ETC

HOURS PUMPED TO DATE 54

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 10 NOV. 1965

ORDER NO. _____

CUSTOMER Local CITY

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION _____

TOTAL WELL DEPTH _____

DISCH. PIPE 12

ORIFICE DIA. 1/0

STATIC LEVEL 57' 6"

BOWL USED 18"

Total Pump Setting _____

PERFORATED AREAS _____

TIME	SERVICES IN PROGRESS	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. 2 P.M.	PUMP 2 P.M.	REMARKS
8:30	13	1775	117	59'-6"	1175	1175	DIRT 67°
10:00	13.5	1810	115	57'-6"	1175	1175	" 62°
11:0	14.5	1875	114'-3"	56'-9"	1175	1175	" 62°
12:00	15.75	1955	111	53'-6"	1175	1175	" 62°
13:00	16.25	1985	109	51'-6"	1175	1175	CLEANING 67°
14:00	18	2089	115'-4"	57'-10"	1200	1200	DIRT 67°
15:00	17.5	2060	118	60'-6"	1200	1200	VERY DIRTY 67°
16:00	18	2089	117'-6"	60	1200	1200	" "
17:00	18.5	2118	117'-6"	60	1200	1200	" "
18:00	19.5	2175	117	59'-6"	1200	1200	" 67°
19:00	20	2175	117'-6"	60	1175	1175	Capillary Loss
20:00	15.5	1940	117	59'-6"	1200	1200	" 67°

REMARKS ON SAND CASING PLUMB OF WELL BY _____

Best Company lots of sand

about 7:00, setting up

a little by 8:00

HOURS PUMPED THIS DAY 12 1/2

HOURS PUMPED TO DATE 66 1/2

TESTED BY CA & U.A.

7

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 18 Nov. 1963

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER LOGAN CITY

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE 1 1/2"

Total Pump Setting 210

ORIFICE DIA 1 1/2"

STATIC LEVEL 521.6'

BOWL USED 18"

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
21:00	1 1/2	2080	116	58.6	1200	1200	Output being read
22:00	1 1/2	2060	118	60.6	1200	1200	" " " 62°
23:00	1 1/2	2060	115.6	58.0	1200	1200	" " " 62°
24:00	1 1/2	2060	115.6	58.0	1200	1200	" " " 62°
01:00	1 1/2	2000	117.	59.6	1200	1200	" " " 62°
02:00	1 1/2	2000	116.5	59.	1200	1200	" " " 62°
03:00	1 1/2	2000	116.5	59.	1200	1200	" " " 62°
04:00	1 1/2	2000	116.5	59.	1200	1200	" " " 62°
05:00	1 1/2	2000	116.5	59.	1200	1200	" " " 62°
06:00	1 1/2	1905	116	59.6	1200	1200	" " " 62°
07:00	1 1/2	1845	118	60.6	1200	1200	" " " 62°
08:00	1 1/2	1970	115	57.6	1200	1200	" " " 62°

REMARKS ON SAND CASING, PUMPS OF WELL ETC.

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 18 1/2

TESTED BY _____

WELL TEST REPORT

DATE 19 NOV 1965

ANDREW WELL DRILLING

ORDER NO. _____

Contractors

Idaho Falls, Idaho

CUSTOMER Local City

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

DISCH. PIPE 12 ORIFICE DIA 10 STATIC LEVEL 57' 6" BOWL USED 18

Total Pump Setting 210 PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPED LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
0900	16.5	2000	113	55' 6"	1200	1200	DIRTY - LITTLE SAND 67°
1000	17	2030	114' 6"	57'	1200	1200	" " " 67°
1100	18	2089	113' 6"	56'	1200	1200	" " " 67°
1200	17.5	2060	114' 6"	57	1200	1200	" " " 67°
1300	16	1970	116	58' 6"	1200	1200	DIRTY - SAND
1400	16	1970	114' 6"	57	1200	1200	" " "
1500	16.5	2000	114	56' 6"	1200	1200	" " "
1600	18	2089	113	55' 6"	1200	1200	DIRTY - LITTLE SAND
1700	18.5	2118	112	54' 6"	1200	1200	" " " 67°
1800	18.5	2118	112	54' 6"	1200	1200	" " " 67°
1900	19	2146	112' 6"	55'	1200	1200	" " " 67°
2000	20	2204	113' 6"	56	1000	1200	Cleaning " " 67°

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 90 1/2

TESTED BY _____

②

WELL TEST REPORT

ANDREW WELL DRILLING

DATE Nov. 19, 1963

ORDER NO. _____

Contractors

Idaho Falls, Idaho

CUSTOMER LEGAN CITY

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE 12"

ORIFICE DIA 10"

STATIC LEVEL 52.6

BOWL USED 18"

Total Pump Setting 210

PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	BLWDOWN	END G.P.M.	PUMP G.P.M.	REMARKS
2100	19.5	2175 ^{37.6}	113.6	56	1200	1200	Casing little sand
2200	19.5	2175 ^{37.6}	113.9	56.3	1200	1200	" "
2300	19.5	2175 ^{37.6}	113.4	55.10	1200	1200	" "
2400	19.5	2175 ^{37.6}	113.9	56.8	1200	1200	" "
0600	18.5	2118 ^{37.6}	111.9	54.3	1200	1200	Stopping
0700	18.5	2118 ^{37.6}	110.6	53	1200	1200	Stopping
0800	18.5	2118 ^{37.6}	110.6	53	1200	1200	Stopping
0900	18.5	2118 ^{37.6}	109.6	51.6	1200	1200	Stopping
1000	18.5	2118 ^{37.6}	109	51.6	1200	1200	Stopping
1100	18.5	2118 ^{37.6}	109	51.6	1200	1200	Stopping
1200	18.5	2118 ^{37.6}	113	55.6	1200	1200	Stopping
1300	19.5	2175 ^{37.6}	112.5	55	1200	1200	Stopping

REMARKS ON SAND CASING, PLUMB OF WELL ETC

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 102 1/2

TESTED BY _____

(11)

WELL TEST REPORT ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE Nov. 29, 1953

ORDER NO _____

CUSTOMER Logan City

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE 1/2"

ORIFICE DIA 1/8"

STATIC LEVEL 57.6

BOWL USED 18"

Total Pump Setting 210

PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
2100	25	2461 ^{43.6}	115.2	57.8	1250	1250	SILT 5/1000
2200	25	2461 ^{43.7}	113.9	56.3	1250	1250	" 5/1000
2300	25	2461 ⁴⁴	113.2	55.8	1250	1250	" 6/1000
2400	25	2461 ^{44.3}	113.0	55.6	1250	1250	" 6/1000
0100	25.5	2487 ^{42.3}	115	57.6	1250	1250	" 7/1000
0200	25	2461 ⁴³	114.5	57	1250	1250	" 6/1000
0300	25	2461 ^{42.8}	115	57-6"	1250	1250	" 6/1000
0400	25	2461 ^{42.8}	115	57-6"	1250	1250	" 8/1000
0500	25	2461 ^{42.5}	115	57-6"	1250	1250	" 8/1000
0600	25	2461 ^{42.5}	115.3	57.9"	1250	1250	" 7/1000
0700	25	2461 ^{42.5}	115	57.6"	1250	1250	" 6/1000
0800	25	2461 ^{42.2}	115	57.6"	1250	1250	" 7/1000

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 126 1/2

TESTED BY _____

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 21 NOV 1963

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER LOGAN CITY

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE 12

Total Pump Setting _____

ORIFICE DIA. 1/2

PERFORATED AREAS _____

WELL DEPTH _____

WELL DEPTH _____

WELL DEPTH _____

WELL DEPTH _____

WELL DEPTH _____

WELL DEPTH _____

STATIC LEVEL 57' 6"

BOWL USED 12"

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. G.P.M.	PUMP G.P.M.	REMARKS
0900	25.25	2474	114' 9"	57' 3"	1250	1250	SILT 1/2000
1000	25.25	2424	114' 3"	56' 9"	1250	1250	3/1000 BAKELASH 9/1000
1100	25.5	2487	113	55' 6"	1250	1250	" 4/1000
1200	26	2513	113' 6"	56	1250	1250	" 5/1000
1300	31	2736	119	61' 6"	1350	1350	" 6/1000
1400	30.5	2713	120	62' 6"	1350	1350	" 7/1000
1500	29	2650	121	63' 6"	1350	1350	" 8/1000
1600	29	2650	120	62' 6"	1350	1350	" 9/1000
1700	29.5	2670	118	60' 6"	1350	1350	" 10/1000
1800	30	2690	117' 10"	60' 4"	1350	1350	" 11/1000
1900	31	2736	115' 4"	57' 10"	1350	1350	" 12/1000
2000	30.5	2713	115	57' 6"	1350	1350	" 13/1000

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 138 1/2

TESTED BY _____

(13)

WELL TEST REPORT

ANDREW WELL DRILLING

DATE 21 Nov. 1963

Idaho Falls, Idaho

Contractors

ORDER NO. _____

CUSTOMER LOGAN CITY

ADDRESS _____

WELL LOCATION _____

DISCH. PIPE 1 1/2"

ORIFICE DIA 10"

STATIC LEVEL 57.6

BOWL USED 18"

Total Pump Setting 210

PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
2100	32	2782	112'	54.6	1350	1350	SIT 23/1000 67°
2200	33	2828	108.5	50.9	1350	1350	" 18/1000
2300	33	2828	109	51.6	1350	1350	" 18/1000
2400	33	2828	107.6	50	1350	1350	" 14/1000
0100	33.5	2850	106.8"	49.2"	1350	1350	" 13/1000
0200	34.5	2896	105'	47.6"	1350	1350	" 11/1000
0300	35	2919	107'	49.6"	1350	1350	" 13/1000
0400	35	2919	105'	47.6"	1350	1350	" 9/1000
0500	35	2919	104.6"	47'	1350	1350	" 9/1000
0600	35	2919	104.6"	47	1350	1350	" 9/1000
0700	35	2919	104	46.6"	1350	1350	" 9/1000
0800	35.5	2941	103.3"	45.9"	1350	1350	" 9/1000

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 150 1/2

TESTED BY _____

67°

(17)

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 22 NOV 1963

ORDER NO. _____

Idaho Falls, Idaho

CUSTOMER Logan City

ADDRESS _____

WELL LOCATION _____

DISCH PIPE 1 1/2

Total Pump Setting _____

ORIFICE DIA 10

PERFORATED AREAS _____

STATIC LEVEL 57' 6"

BOWL USED 18

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
09:30	36.5	2980	104	46' 6"	1350	1350	SAND-SILT 14/1000 10/1000
10:00	36.5	2980	104.3	46' 9"	1350	1350	9/1000
11:00	36.5	2980	104	46' 6"	1350	1350	8/1000
12:00	36.5	2980	104	46' 6"	1350	1350	7/1000
13:00	35.5	2941	104.7	47' 1"	1350	1350	6/1000
14:00	35.5	2941	104.3	47' 0"	1350	1350	5/1000
15:00	34.5	2896	105	47' 6"	1350	1350	4/1000
16:00	34	2873	107	49' 6"	1350	1350	3/1000
17:00	34.5	2896	106	48' 6"	1350	1350	2/1000

HOURS PUMPED THIS DAY 9

HOURS PUMPED TO DATE 159 1/2

TESTED BY _____

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

ORDER NO. _____

DATE 26 Dec 1973

CUSTOMER LEGAN CITY

ADDRESS 10TH AVE

WELL LOCATION 10TH AVE

DISCH. PIPE 12

OFFICE DIA. 10

STATIC LEVEL 58

BOWL USED 20

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

Total Pump Setting _____

PERFORATED AREAS _____

TIME	GASOLINE IN BRICKS	G.P.M.	PERCENTS LEVEL	MANHOLE	WELL DEPTH	PUMP DEPTH	WINDS
1700	4	1000	109	51	900	900	SILT 30' / 1000
1800	4	1000	115	57	900	900	" 6' / 1000
1900	4.5	1050	115	57	900	900	" 3' / 1000
2000	4.5	1050	114	56	900	900	" 3' / 1000
2100	4.5	1050	113.3	55.5	900	900	" 2' / 1000
2200	4.5	1050	112.6	54.8	900	900	" 3' / 1000
2300	4.5	1050	112	54	900	900	" 3' / 1000
2400	4.5	1050	113	55	900	900	" 3' / 1000
0100	4.5	1050	113	55	900	900	" 3' / 1000
0200	4	1000	112	54	900	900	" 3' / 1000
0300	4	1000	112	54	900	900	" 3' / 1000
0400	4	1000	112.5	54.5	900	900	" 3' / 1000

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 12

TESTED BY _____

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

②

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

ORDER NO. _____

DATE 27 Dec 63

CUSTOMER LEGAN CITY

ADDRESS _____

WELL LOCATION 10TH NORTH

DISCH. PIPE 12"

ORIFICE DIA. 10"

STATIC LEVEL 56'

BOWL USED 20"

WELL DEPTH _____

Casing I. D. _____

WELL DEPTH _____

Casing I. D. _____

TOTAL WELL DEPTH _____

Total Pump Setting _____

PERFORATED AREAS _____

TIME	GAGES IN BENCH	O.P.A.	PUMPING LEVEL	DRAWDOWN	WEL. P.P.M.	PUMP P.P.M.	REMARKS
0500	4.5	1050	125	65	925	925	SLT 3/4"
0600	4.5	1050	122	64	925	925	" 1/2"
0700	4.5	1050	122	64	925	925	" 1/2"
0800	4.5	1050	121	69	925	925	CLINICAL
0900	4.5	1050	118	60	925	925	1/2" used
1000	5.25	1125	137	79	1000	1000	3/4" used
1100	5.25	1125	135	77	1000	1000	3/4" BACKFLUSH
1200	5.25	1125	135	77	1000	1000	3/4" BACKFLUSH
0300	5.25	1125	135	77	1000	1000	50% SAND = 9/16"
0400	5.5	1150	135	77	1000	1000	" 3/4" = " 3/4"
1500	6	1300	135.6	77.6	1000	1000	" 3/4" = " 3/4"
1600	6	1300	135.6	77.6	1000	1000	" 3/4" = " 3/4"

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY 10

HOURS PUMPED TO DATE 28

TESTED BY _____

3

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE 27 Dec. 63
ORDER NO. _____

CUSTOMER LODGE CITY

ADDRESS _____

WELL LOCATION 20th NORTH

DISCH. PIPE 1 1/2"

ORIFICE DIA. 10"

WELL DEPTH _____
Casing I. D. _____
WELL DEPTH _____
Casing I. D. _____
TOTAL WELL DEPTH _____
STATIC LEVEL 58'

BOWL USED 20"

Total Pump Setting 210

PERFORATED AREAS _____

TIME	ORIFICE IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. E.P.M.	PUMP E.P.M.	REMARKS
1700	6	1200	135	77	1000	1000	SILT 3/4" floor
1800	8.5	1440	122.6	119.6	1150	1150	" floor 67°
1900	8.5	1440	125	117	1150	1150	" floor
2000	8.5	1440	125	117	1150	1150	" CLEANING
2100	8.5	1440	125	117	1150	1150	" CLEANING
2200	8.5	1440	120	112	1150	1150	MOSTLY CLEAN
2300	8.5	1440	170	114	1150	1150	STOP 3/4" floor 67°
2400	8.5	1440	170	114	1150	1150	" floor

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY _____
HOURS PUMPED TO DATE _____
TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 26 DEC. 1973
ORDER NO. _____

CUSTOMER LEGAN CITY _____

ADDRESS 10TH WEST

WELL LOCATION 10TH NORTH

DISCH. PIPE 1 1/2

ORIFICE DIA. 1 1/2

STATIC LEVEL 57.8

BOWL USED 20

Total Pump Setting _____

PERFORATED AREAS _____

TIME	GAGES IN INCHES	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. S.P.M.	PUMP S.P.M.	REMARKS
1700	4	1000	109	51	900	900	SILT 30/1000
1800	4	1000	115	57	900	900	6/1000
1900	4.5	1050	115	57	900	900	3/1000 67°
2000	4.5	1050	114	56	900	900	3/1000
2100	4.5	1050	113.2	55.2	900	900	3/1000
2200	4.5	1050	112.6	54.6	900	900	3/1000 67°
2300	4.5	1050	112	54	900	900	3/1000
2400	4.5	1050	113	55	900	900	3/1000
2100	4.5	1050	113	55	900	900	3/1000 67°
2200	4	1000	112	54	900	900	3/1000
2300	4	1000	112	54	900	900	3/1000
2400	4	1000	112.5	54.5	900	900	3/1000

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY 2

TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 27 Dec 63
ORDER NO. _____

CUSTOMER Logan City

ADDRESS _____

WELL LOCATION 10th NORTH

DISCH PIPE 1 1/2"

ORIFICE DIA 10"

STATIC LEVEL 56'

BOWL USED 20'

WELL DEPTH _____ Casing I.D. _____

WELL DEPTH _____ Casing I.D. _____

TOTAL WELL DEPTH _____ Casing I.D. _____

Total Pump Setting _____ PERFORATED AREAS _____

TIME	Gauges in inches	P.S.M.	Pumps in level	Barometer	SP. S.P.M.	PUMP S.P.M.	REMARKS
0500	4.5	1050	125	65	925	925	SILT 3/4" 1/2"
0600	4.5	1050	122	64	925	925	" 1/100
0700	4.5	1050	122	64	925	925	" 1/100
0800	4.5	1050	121	63	925	925	CLAY
0900	4.5	1050	118	60	925	925	Mud
1000	5.25	1125	137	79	1000	1000	3/4" 1/2"
1100	5.25	1125	135	77	1000	1000	3/4" 1/2"
1200	5.25	1125	135	77	1000	1000	3/4" 1/2"
0300	5.25	1125	135	77	1000	1000	SILT 1/2" 1/2"
0400	5.5	1150	135	77	1000	1000	" 1/2" 1/2"
1500	6	1200	135	77	1000	1000	" 1/2" 1/2"
1600	6	1200	135	77	1000	1000	" 1/2" 1/2"

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

HOURS PUMPED THIS DAY 12
HOURS PUMPED TO DATE 27
TESTED BY _____

3

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE 27 Dec. 63

ORDER NO. _____

CUSTOMER Good City

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10th North

TOTAL WELL DEPTH _____

DISCH. PIPE 1 1/2"

ORIFICE DIA 10"

STATIC LEVEL 58'

BOWL USED 20"

Total Pump Setting 210

PERFORATED AREAS _____

TIME	GALLONS IN BRICKS	G.P.M.	PUMPING LEVEL	DRAWDOWN	ENG. R.P.M.	PUMP R.P.M.	REMARKS
1700	6	1200	135	77	1000	1000	5 L.T. 3/1000
1800	8.5	1440	122.6	119.6	1150	1150	" 9/1000 670
1900	8.5	1440	125	117	1150	1150	" 8/1000
2000	8.5	1440	125	117	1150	1150	" 3/1000
2100	8.5	1440	125	117	1150	1150	" CLEANING
2200	8.5	1440	125	117	1150	1150	" 3/1000
2300	8.5	1440	120	112	1150	1150	" 3/1000
2400	8.5	1440	122	114	1150	1150	" 1/1000

HOURS PUMPED THIS DAY _____

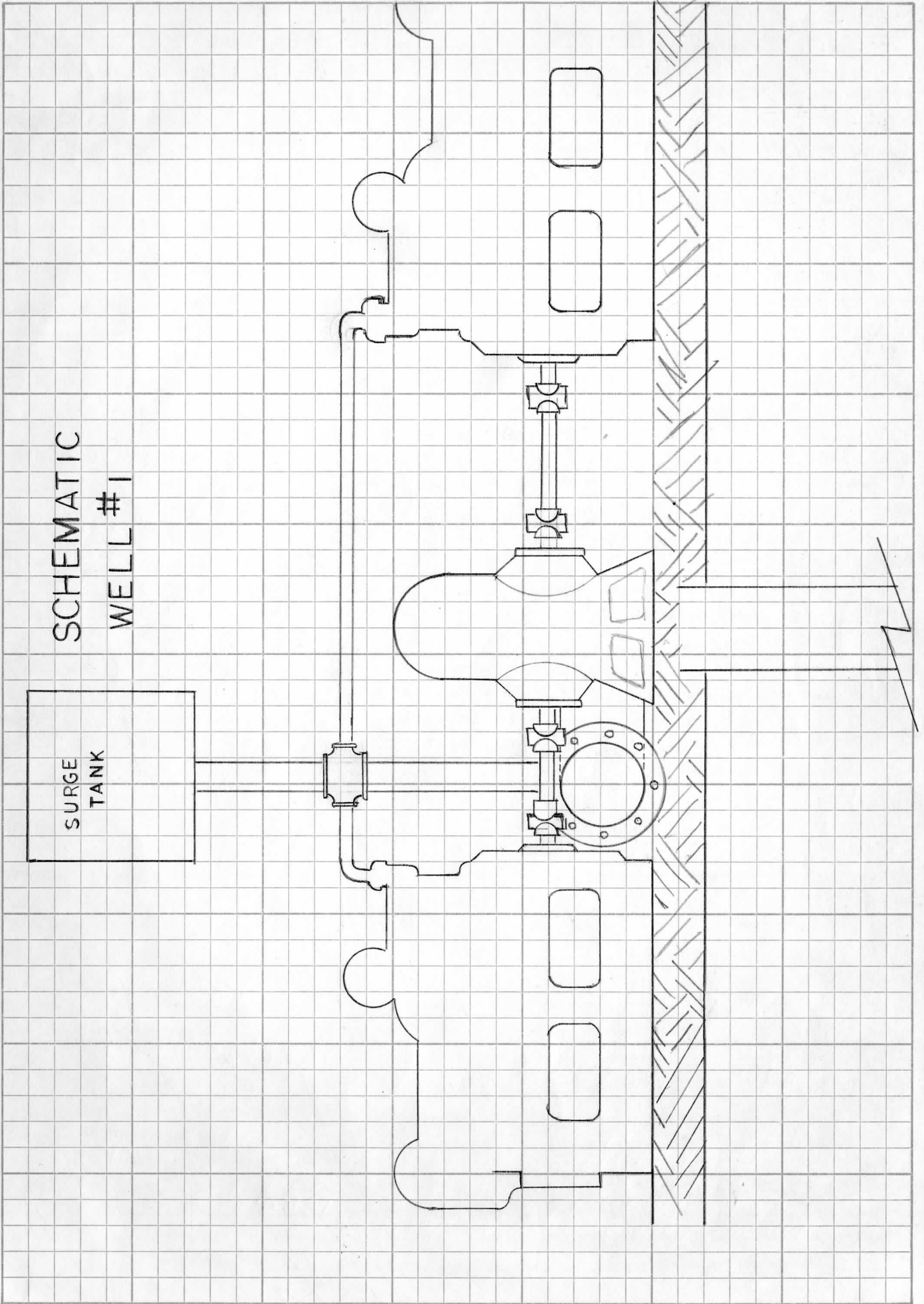
REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED TO DATE _____

TESTED BY _____

SCHEMATIC
WELL #1

SURGE
TANK



G. D. CARLYLE THOMPSON, M.D.
DIRECTOR OF PUBLIC HEALTH



STATE BOARD OF HEALTH
WATER POLLUTION CONTROL BOARD
HOSPITAL ADVISORY COUNCIL
NURSING HOME ADVISORY COUNCIL
MENTAL HEALTH ADVISORY COUNCIL

UTAH DEPARTMENT OF HEALTH

45 FORT DOUGLAS BLVD.
SALT LAKE CITY 13, UTAH

April 12, 1963

Honorable Mayor and City Commission
Logan
Utah

Gentlemen:

Enclosed is a copy of test report #63-144, covering results of chemical analysis of a water sample submitted from the Logan City well located at 2nd East & Center Street. The State Engineer's application number is 32884.

With the exception of total iron, the analysis does not indicate the presence of any dissolved minerals in quantities exceeding limits established by the U. S. Public Health Service for drinking water supplies.

Since this is a new well it is possible that the excessive total iron contained in the water sample was a direct result of the well drilling operation. We therefore suggest that another one-gallon sample be submitted after the well has been pumped for a considerable period of time (at least 24 hours continuous pumping) so that a re-check of total iron can be made.

If you have any questions concerning this report please let us know.

Very truly yours,

UTAH STATE DEPARTMENT OF HEALTH

Lynn M. Thatcher, Director
Division of Sanitation

CKS:cc
Enclosure

cc: Logan City Health Dept.
State Engineer

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on 2/3/63
Analysis Authorized by
Howard L. Hurst

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)
Stream Spring Well
City or Town water distribution system
Other (describe) _____

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) _____
2nd East & Center St., Logan, Utah

STATE ENGINEER'S APPLICATION OR CLAIM NO. 3208
SUPPLY OWNED BY: Logan City Corporation
PRESENT USE OF SUPPLY: New well
PROPOSED USE OF SUPPLY: Culinary
SAMPLE COLLECTED BY: Roger Stephens DATE: 2/1/63
REPORT RESULTS TO: Roger Stephens
Address: 240 North Main St., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity	<u>88</u>	Turbidity Units	Iron (total) as Fe	<u>6.27</u>	mg/l
Conductivity	<u>375</u>	micromhos/cm	Iron in filtered sample	<u>0.12</u>	mg/l
pH	<u>8.15</u>		as Fe	<u>0.00</u>	mg/l
Total Dissolved Solids	<u>210</u>	mg/l	Lead as Pb	<u>21</u>	mg/l
Alkalinity (total) as CaCO ₃	<u>165</u>	mg/l	Magnesium as Mg	<u>0.00</u>	mg/l
Aluminum as Al	<u>0.00</u>	mg/l	Manganese as Mn	<u>1.2</u>	mg/l
Arsenic as As	<u>0.00</u>	mg/l	Nitrate as NO ₃	<u>17.6</u>	mg/l
Barium as Ba	<u>197</u>	mg/l	Phosphate as PO ₄	<u>1.5</u>	mg/l
Bicarbonate as HCO ₃	<u>0.00</u>	mg/l	Phenols as Phenol	<u>1.5</u>	mg/l
Boron as B	<u>0.00</u>	mg/l	Potassium as K	<u>9.0</u>	mg/l
Cadmium as Cd	<u>42</u>	mg/l	Selenium as Se	<u>9.0</u>	mg/l
Calcium as Ca	<u>1.5</u>	mg/l	Silica as SiO ₂	<u>7.0</u>	mg/l
Carbonate as CO ₃	<u>8</u>	mg/l	Silver as Ag	<u>9.0</u>	mg/l
Chloride as Cl	<u>0.00</u>	mg/l	Sodium as Na	<u>0.00</u>	mg/l
Chromium (hexavalent) as Cr	<u>0.00</u>	mg/l	Sulfate as SO ₄	<u>0.00</u>	mg/l
Copper as Cu	<u>0.00</u>	mg/l	Surfactant as ABS	<u>0.00</u>	mg/l
Cyanide as CN	<u>191</u>	mg/l	Zinc as Zn	<u>0.00</u>	mg/l
Fluoride as F	<u>0.00</u>	mg/l	Suspended alpha		uuc/l
Hardness (total) as CaCO ₃	<u>0.00</u>	mg/l	Dissolved alpha		uuc/l
Hydroxide as OH		mg/l	Suspended beta		uuc/l
			Dissolved beta		uuc/l

G. D. CARLYLE THOMPSON, M.D.
DIRECTOR OF PUBLIC HEALTH



STATE BOARD OF HEALTH
WATER POLLUTION CONTROL BOARD
HOSPITAL ADVISORY COUNCIL
NURSING HOME ADVISORY COUNCIL
MENTAL HEALTH ADVISORY COUNCIL

UTAH DEPARTMENT OF HEALTH

48 FORT DOUGLAS BLVD.
SALT LAKE CITY 13, UTAH

May 20, 1963

Honorable Mayor and City Commission
Logan
Utah

Gentlemen:

Enclosed is a copy of our laboratory report #63-206, covering results of chemical analysis of a water sample submitted from Logan City's new Crockett Avenue and Canyon Road well (State Engineer's application #32283).

With the exception of total iron, the analysis does not indicate the presence of any dissolved minerals in quantities exceeding limits established by the U. S. Public Health Service for drinking water supplies.

Since this is a new well, it is suggested that a re-check on total iron be made. This should be done by collecting and submitting another one-gallon sample after the well has been pumped continuously for a period of at least 24 hours.

Very truly yours,

UTAH STATE DEPARTMENT OF HEALTH

Lynn M. Thatcher, Director
Division of Sanitation

CRS:cc
Enclosure

cc: Logan City Health Dept.
State Engineer

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

63 208

DO NOT WRITE HERE
Sample Received on 3/20/63
Analysis Authorized by
Howard M. Burt

WATER SAMPLE FOR CHEMICAL ANALYSIS
WATER SAMPLE FOR RADIOLOGIC ANALYSIS

SAMPLE COLLECTED FROM: (check one)

Stream Spring Well

City or Town water distribution system

Other (describe) Culinary

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) Crockett Avenue & Canyon Road

STATE ENGINEER'S APPLICATION OR CLAIM NO. 33883

SUPPLY OWNED BY: Logan City

PRESENT USE OF SUPPLY: Being developed

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: Lesall Bodily DATE: 3/14/63

REPORT RESULTS TO: Roger Stephens

Address: Logan City Health Dept., Logan, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity <u>15</u>	Turbidity Units	Iron (total) as Fe	<u>0.87</u> mg/l
Conductivity <u>372</u>	micromhos/cm	Iron in filtered sample	<u>0.05</u> mg/l
pH <u>8.5</u>		Lead as Pb as Fe	<u>0.00</u> mg/l
Total Dissolved Solids <u>234</u>	mg/l	Magnesium as Mg	<u>21</u> mg/l
Alkalinity (total) as CaCO ₃ <u>185</u>	mg/l	Manganese as Mn	<u>0.05</u> mg/l
Aluminum as Al	mg/l	Nitrate as NO ₃	<u>0.0</u> mg/l
Arsenic as As <u>0.02</u>	mg/l	Phosphate as PO ₄	<u>1.2</u> mg/l
Barium as Ba	mg/l	Phenols as Phenol	mg/l
Bicarbonate as HCO ₃ <u>218</u>	mg/l	Potassium as K	<u>0.3</u> mg/l
Boron as B <u>0.02</u>	mg/l	Selenium as Se	mg/l
Cadmium as Cd	mg/l	Silica as SiO ₂	<u>7.3</u> mg/l
Calcium as Ca <u>46</u>	mg/l	Silver as Ag	mg/l
Carbonate as CO ₃ <u>1.8</u>	mg/l	Sodium as Na	<u>6.5</u> mg/l
Chloride as Cl <u>10</u>	mg/l	Sulfate as SO ₄	<u>14</u> mg/l
Chromium (hexavalent) as Cr	mg/l	Surfactant as ABS	mg/l
Copper as Cu <u>0.00</u>	mg/l	Zinc as Zn	<u>0.00</u> mg/l
Cyanide as CN	mg/l	Suspended alpha	uuc/l
Fluoride as F <u>0.31</u>	mg/l	Dissolved alpha	uuc/l
Hardness (total) as CaCO ₃ <u>301</u>	mg/l	Suspended beta	uuc/l
Hydroxide as OH <u>0.05</u>	mg/l	Dissolved beta	uuc/l

SUMMARY OF PROCEDURE USED IN GROUTING JOINT IN WELL AT 700 NORTH 600 EAST, LOGAN, UTAH

THESE NOTES DESCRIBE BRIEFLY THE PROCEDURE USED IN GROUTING THE JOINT BETWEEN THE 16-INCH AND THE 20-INCH WELL CASING BY RUSSELL BROWN IN THE PERIOD FROM MAY 14 TO MAY 21, 1962.

A 13-INCH DIAMETER CONCRETE PLUG AS SHOWN ON FIGURE 1 WAS CAST ON A DOUBLE STRAND OF 1-INCH ROPE 15 FEET LONG. THIS ROPE WAS PLACED ON THE HOOK ON A 3/8-INCH CABLE AND TIED WITH A PIECE OF 1/8-INCH NYLON LINE EXTENDING TO THE SURFACE. THIS WAS DONE IN SUCH A MANNER THAT IT INSURED ^{AGAINST} ACCIDENTAL UNHOOKING OF THE ROPE FROM THE CABLE AND YET WOULD PROVIDE FOR EASY RELEASE OF THE ROPE WHEN REQUIRED.

THIS PLUG WAS LOWERED DOWN THE WELL UNTIL THE TOP OF THE PLUG WAS 235.75 FEET BELOW THE TOP OF THE 20-INCH CASING. ONE FIVE-GALLON BUCKET OF 2-INCH DIAMETER ROCK WAS PLACED ON TOP OF THE PLUG USING A SACK AND TWO LINES. TWO BUCKETS OF 1-1/2-INCH TO 3/8-INCH GRAVEL AND TWO BUCKETS OF SAND WERE PLACED BY THE SAME METHOD. MEASUREMENTS PLACED THE TOP OF THIS GRAVEL AT 233.75 FEET FROM THE TOP OF THE CASING.

FIVE 5-GALLON BUCKETS OF GROUT, CONSISTING OF 2 PARTS MINUS 1/8 INCH SAND TO ONE PART CEMENT, WERE POURED DOWN DRILL RODS HAVING A 1-INCH DIAMETER HOLE AND ENDING JUST ABOVE THE SAND.

FIVE BUCKETS OF GROUT = 3.65 CUBIC FEET OR 2.8 FEET OF GROUT IN THE 16-INCH CASING. THIS GROUT WAS ALLOWED TO SET FOR 24 HOURS.

THURSDAY MORNING, MAY 17, THE JOINT BETWEEN THE 16-INCH AND 20-INCH WAS SOUNDED AT 228 FEET FROM THE TOP OF THE CASING AND THE GROUT PLUG WAS AT 231 FEET. THESE MEASUREMENTS INDICATED A GROUT PLUG OF 2.75 FEET COMPARED TO THE 2.8 FEET DETERMINED FROM VOLUME RELATIONS, THUS IT WAS CONCLUDED THAT THE PLUG WAS BELOW ANY JOINT OR SPLIT THAT MIGHT EXIST IN THE 16-INCH CASING. THE TOP OF THIS PLUG WAS 3 FEET BELOW THE TOP OF THE 16-INCH PIPE.

THE GROUTING OF THE JOINT PROCEEDED AS FOLLOWS:

1. TEN BUCKETS OF GROUT OR 7.3 CUBIC FEET OF GROUT WERE POURED DOWN THE DRILL RODS SET 6 INCHES ABOVE THE PLUG AND THEN THE RODS WERE PULLED BACK. FOUR BUCKETS OF WATER WERE POURED DOWN THE RODS. THIS WATER IS THE AMOUNT REQUIRED TO FILL THE RODS AND INSURE THAT ALL THE GROUT WAS OUT OF THEM. A MEASUREMENT OF THE GROUT LEVEL AND THE WATER LEVEL BY METHODS DESCRIBED BELOW INDICATED THAT THE GROUT-WATER INTERFACE WAS 30 INCHES ABOVE THE PLUG WHILE THE WATER LEVEL REMAINED CONSTANT. VOLUME COMPUTATIONS INDICATED 3.4 CUBIC FEET IN THE 16-INCH PIPE AND A LOSS OF 2.9 CUBIC FEET.
2. MORE GROUT WAS POURED DOWN THE RODS AFTER THEY WERE LOWERED INTO THE GROUT POOL. WHEN A TOTAL OF 16 BUCKETS HAD BEEN PLACED THE GROUT LEVEL HAD RISEN TO 65 INCHES ABOVE THE GROUT PLUG AND THE WATER LEVEL HAD RISEN 1 FOOT.
3. THREE MORE BUCKETS OF GROUT WERE ADDED AND THREE BUCKETS OF WATER TO WASH OUT THE RODS. MEASUREMENTS INDICATED THAT THE GROUT LEVEL HAD DECLINED TO 58 INCHES WHILE THE WATER LEVEL HAD DROPPED TO 6 INCHES ABOVE NORMAL. GROUTING WAS FINISHED AT 10:30.

A SUMMARY OF THE GROUT IS AS FOLLOWS:

19 BUCKETS =	13.9 CU. FT.
3 FEET IN 16-INCH PIPE = 3.9	
22 INCHES IN 20-INCH PIPE = <u>3.7</u>	
GROUT IN PIPE	<u>7.6 CU. FT.</u>
LOSS THROUGH JOINT	6.3 CU. FT.

FREQUENT MEASUREMENTS INDICATED THAT THE LEVEL REMAINED CONSTANT. AT 1:00 THE CABLE WAS SLACKED OFF AND AT 2:00, WITH THE LEVEL STILL AT 50 INCHES, IT WAS UNHOOKED FROM THE ROPE AND REMOVED.

AN ATTEMPT WAS MADE TO DRILL THE PLUG OUT ON MAY 21 WITH A 4-INCH BIT. THE PLUG DRILLED QUITE EASILY BUT WOULD NOT SHATTER. AS A RESULT A 4-INCH HOLE WAS DRILLED IN THE PLUG. IT WAS NOT POSSIBLE TO COMPLETELY REMOVE THE PLUG FROM THE CASING WITH THE EQUIPMENT AVAILABLE.

THE GROUT LEVEL WAS DETERMINED BY SUSPENDING A WEIGHT FROM A SPRING BALANCE WITH A NYLON CORD. THE WEIGHT WAS A 2-QUART CAN FILLED WITH SAND AND PIECES OF IRON TO OBTAIN THE PROPER WEIGHT VOLUME RELATION. THE RESULTING WEIGHT AND CORD WEIGHED 15 POUNDS SUSPENDED IN AIR, 12 POUNDS SUSPENDED IN WATER, AND 7 POUNDS WHEN COMPLETELY SUBMERGED IN GROUT. WITH THIS DEVICE IT WAS POSSIBLE TO DETERMINE THE GROUT LEVEL RATHER CLOSELY.

WATER WAS MEASURED WITH A WEIGHTED LINE BY RECORDING THE DEPTH TO THE SPLASHING SOUND AS THE WEIGHT HIT THE SURFACE.

WATER LEVEL
149' from top of
20" CASING

ELEV 228'
FROM TOP
OF 20" CASING

CABLE TO SURFACE (REMOVED)
20" ϕ WELL CASING

GROUT PLACED MAY 17 1962

NET AMOUNT PLACED	13.9 cuft
COMPUTED AMOUNT IN PIPE	7.6 cuft
LOSS THROUGH JOINT	6.3 cuft

1'-10"
4'-10"
3.0'
2.75'
2.0'

GROUT PLUG PLACED
MAY 16

1" ROPE

SAND

1/2" to 3/8" GRAVEL

2" ROCK

CONCRETE PLUG

16" ϕ WELL CASING

GROUT MIX

2 PARTS SAND
1 PART CEMENT

SECTION THROUGH WELL
GROUT PLUG PLACED IN WELL
AT 700 NORTH 600 EAST
LOGAN - UTAH

BY Russell O. Brown

FIGURE 1

WELL # 3

The pump at well #3 turned off July 2, 1963 due to a broken shaft. The Johnson Pump Co. from Idaho Falls pulled the pump on July 23, 1963.

The following conditions were found:

1. The first 5 feet pulled was extremely tight indicating a definite bind (air line bound).
2. Loose oil tube 10th section (100')
3. Bearing cuttings -oil- and water in section 15 (150').
4. Shaft broken off 5' above pump bowls.
5. Top bowl casing cracked 3/4 way around and two bearings frozen tight.
6. Impellers worn badly.
7. Depth check 409.3'

On July 25, 1963 the pump was reset under the following conditions.

1. All questionable shaft on bearings and tube were replaced.
2. Pump bowls were raised 10' (bottom of pump bowls at 215'
bottom of screen at 235')
3. Impellers were replaced.
4. 1st stage of pump bowls replaced.
5. New pump bowls shaft and bearings.
6. Pump started July 25, 1963 at 6:30 P.M.

The pump again stopped on Aug. 11, 1963, due to broken shaft.

The following conditions were found when Johnsons pulled the pump on Aug. 14, 1963:

1. Pump pulled extremely hard the first 5 feet (Air line bound).
2. The shaft was broken in 5 places, bearings and oil tube damaged.
3. Pump bowls OK but shaft broken 5' above pump bowls.
4. Air line bound at 165' level indicated by smashed section

on air line.

5. A pipe "pig" 12' long with end flared to 18" lowered down the well to 229' (bottom), 20" section seemed OK.

Decided to make a television study of the well and casing to determine cause for shaft failure.

Television study made on Aug. 20, 1963 by R.W. "Bill" Miller of Layne & Bowler Pump Co., 2943 Vail Ave., Los Angeles 22 Calif.

The visual study showed the following:

- (a) Change from 20" casing to 16" casing at 230'. Visual check showed 20" casing OK.
- (b) The television picture showed a poor cut off on the top of the 16" casing. The 16" casing was not centered in the 20" but offset completely to one side, and the opposite side had been flared partially in and partially out further restricting the diameter (see attached picture.)
- (c) It was agreed by those present, Howard Johnson (Johnson Pump Co) Bill Miller (Layne & Bowler Pump & Television), and Ray Hugie (City Engineer) that this situation plus the fact there was a slight bend in the 20" casing has put undue side pressure on the pump and shaft at possibly the pump area and at the 165' depth which more than likely has caused the shaft to break at the pump bowls.
- (d) The visual check showed perforations as follows:
311' to 323', 24 rows between 335' and 369', 6 rows between between 380' and 388' (these were partially plugged indicating little water if any from this area.

- (e) The change from 16" casing to 12" casing showed a fairly good section, but just below the flared area the casing showed an approximate 2" wide split down to the sand filled area at 401'. It was our opinion that this split is where the sand is coming from to fill the lower section of the well (460' to 401' since drilling of the well).

The pump reinstalled Aug. 21, 1963 under the following conditions:

1. All new shaft and tube, 20' lengths to a depth of 216'4".
1-5' section with the pump, 10- 20' lengths, 1-5' length, pump bowls and screen 6'4"
2. The 20' of suction below the pump was eliminated and the screen was placed just below the pump.
3. The pump and column was hanging free and clear.

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE 3 Jan 1964

ORDER NO. _____

CUSTOMER LEWIS CITY

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 167th NORTH

TOTAL WELL DEPTH _____

DISCH. PIPE 1 1/2"

ORIFICE DIA. 1/2" STATIC LEVEL 620 BOWL USED 250

Total Pump Setting 216 PERFORATED AREAS _____

TIME	GAINC IN INCHES	G.P.M.	PERFORATED LEVEL	DOWNFLOW	BOB. G.P.M.	PUMP G.P.M.	REMARKS
6:30	84	4501	125	95	35	1600	SAND 'down-study
7:30	84	4501	125	95.6	35.6	1600	TRACS
8:30	84	4501	125	96	36	1600	"
9:30	84	4501	125	96	36	1600	"
10:30	51	3511	140	85	25	1400	"
11:30	51	3511	140	84.6	24.6	1400	"
12:30	26	2513	175	74.6	14.6	1100	"
13:30	26	2513	175	74.6	14.6	1100	"
14:30	9.5	1500	230	64.4	4.4	850	"

HOURS PUMPED THIS DAY _____

HOURS PUMPED TO DATE _____

TESTED BY _____

REMARKS ON SAND, CASING, PLUMBS OF WELL, ETC.

WATER LEAKS FROM BOWL TO LEFT OF WELL - DRAIN

BOB. TO SAND - 3' FROM BOWL - 1' FROM SAND

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

DATE JAN 1964

ORDER NO. _____

CUSTOMER LOGAN CITY

ADDRESS _____

WELL LOCATION 10TH NORTH

DISCH. PIPE 12 ORICE DIA. 10

Total Pump Setting 2710 PERFORATED AREAS _____

WELL DEPTH _____ Casing I. D. _____
WELL DEPTH _____ Casing I. D. _____
TOTAL WELL DEPTH _____
STATIC LEVEL 56 BOWL USED 20

TIME	GAINC IN FEET	G.P.A.	PUMPED FEET	BAROMETER	ENG. G.P.A.	PUMP G.P.A.	REMARKS
10:30 A	12.5	1740	80	22	1600	1600	SILT 10.5' / 1600
11:30 A	16	1970	80	22	1000	1000	" " 1/1000
12:00	21	2260	83.5	25.5	1100	1100	SAND-SILT 1/1000
13:00	21.5	2298	83	25	1100	1100	" SILT 3/1000 TO 1000 FT
14:00	28	2610	86.10	28.10	1200	1200	" " 3/1000
15:00	29	2650	87.6	29.6	1200	1200	" " 1/1000
16:00	28.5	2630	87.4	29.4	1200	1200	" " 1/1000
17:00	28.5	2630	87.8	29.8	1200	1200	" " 1/1000
18:00	28.5	2630	87.6	29.6	1200	1200	Opening Valve Bottom 3/1000
19:00	30	2690	82.10	24.10	1200	1200	" " 3/1000
20:00	31	2736	80	22	1200	1200	" " 3/1000
21:00	32	2780	79	21	1200	1200	" " 3/1000 TO BOTTOM

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

HOURS PUMPED THIS DAY 11 1/2
HOURS PUMPED TO DATE _____
TESTED BY _____

Idaho Falls, Idaho

WELL TEST REPORT

ANDREW WELLS DRILLING

Contractors

142 JAN - 64
DATE ~~1/23/64~~

ORDER NO _____

CUSTOMER FORAN CITY

ADDRESS _____

WELL LOCATION 16th NORTH

DISCH. PIPE 12

Total Pump Setting 216

ORIFICE DIA 10

PERFORATED AREAS _____

STATIC LEVEL 58

BOWL USED 20

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

WELL DEPTH _____ Casing I. D. _____

TOTAL WELL DEPTH _____

TIME	GAGES IN HOURS	G.P.M.	PUMPED LEVEL	BAROMETER	ENG. G.P.M.	PUMP G.P.M.	REMARKS
2200	40	3430	83.6	25.6	1300	1300	SANDY SILENT
2300	40	3130	55.8	25.8	1300	1300	CLEAN
2400	40	3130	21.6	23.6	1300	1300	"
0100	45.5	3316	8.6	28	1350	1350	VERY LITTLE SAND-CLEAR
0200	47	3368	8.6.25	28.25	1350	1350	CLEAR
0300	51	3511	8.9	31	1400	1400	LITTLE SAND-CLEAR
0400	51	3511	8.9	31	1400	1400	"
0500	51	3511	8.9	31	1400	1400	"
0600	59	3768	9.4	36	1475	1475	1/1600
0700	59.5	3764	9.4.25	36.25	1475	1475	TRACE
0800	59.5	3784	9.4.25	36.25	1475	1475	"
0900	59.5	3984	9.4.5	36.5	1475	1475	"

HOURS PUMPED THIS DAY 12

HOURS PUMPED TO DATE 23 1/2

REMARKS ON SAND, CASING, PUMPS OF WELL, ETC.

TESTED BY _____

3

WELL TEST REPORT

ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE 2 JAN 1964

ORDER NO. _____

CUSTOMER LEGAN CITY

WELL DEPTH _____ Casing I. D. _____

ADDRESS _____

WELL DEPTH _____ Casing I. D. _____

WELL LOCATION 10TH NORTH

TOTAL WELL DEPTH _____

DISCH. PIPE 12

STATIC LEVEL 58 BOWL USED 2.0

Total Pump Setting _____

PERFORATED AREAS _____

TIME	GAUGE IN INCHES	G.P.M.	PUMPING LEVEL	DOWNFLOW	ENG. R.P.M.	PUMP R.P.M.	REMARKS
10:00	60	3800	94.5	36.5	1475	1475	Trace - Backflow 3/1000
11:00	63	3690	92.75	34.75	1475	1475	" " "
12:00	64	3920	91	33	1475	1475	" " "
13:00	69.5	4090	93	35	1500	1500	TRACE Backflow 2/1000
14:00	69.5	4000	93.8	35.8	1500	1500	" SANDSIT 1625 65°
15:00	83.5	4486	101.6	43.6	1625	1625	" " "
16:00	83	4474	101.6	43.6	1625	1625	" " "
17:00	83.5	4486	102.9	44.9	1625	1625	" GOOD BACKFLOW 65°
18:00	83.5	4486	102.6	44.6	1625	1625	" " "
19:00	84	4501	99	41	1625	1625	" " "
20:00	85.5	4542	97	39	1625	1625	TRACE " 1000
21:00	86	4555	96.4	38.4	1625	1625	" " 1000

HOURS PUMPED THIS DAY 12

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

TESTED BY _____

3:000 @ 4:50
2:000 @ 3:00
1:000 @ 2:50

(4)

WELL TEST REPORT ANDREW WELL DRILLING

Contractors

Idaho Falls, Idaho

DATE 24 3 JAN. 63
ORDER NO. _____

CUSTOMER KAGAN CITY

ADDRESS _____

WELL LOCATION 10th NORTH

DISCH. PIPE 1 1/2

Total Pump Setting 210'

PERFORATED AREAS _____

ORIFICE DIA. 1/2"

TIME

ORIFICE IN INCHES

G.P.M.

PUMPING LEVEL

DRAINDOWN

ONE G.P.M.

PUMP G.P.M.

REMARKS

WELL DEPTH _____

Casing I.D. _____

WELL DEPTH _____

Casing I.D. _____

TOTAL WELL DEPTH _____

Casing I.D. _____

STATIC LEVEL _____

BOWL USED 2 1/2"

2200	86	4555	96.8	38.8	16.25	16.25	TRAC OF SAND

REMARKS ON SAND, CASING, PLUMB OF WELL, ETC.

HOURS PUMPED THIS DAY 1
HOURS PUMPED TO DATE 36.15
TESTED BY _____