

91 (667-011) NCS well 1-A. ~~Municipal and industrial~~ {military}
well in limestone. Drilled, 1954 by U.S. Navy. Altitude,
429 ft. Depth, 463 ft. Diameter, 10 in. Casing, 463 ft.;
lower 30 ft. perforated. Pump setting, 444 ft. Water
level, Sept. 20, 1955, ⁺⁴425.3 ft. Pumping rate, 1955-56,
200 gpm (flow restricted by an orifice). Pumpage, 1955, 158,000
gpd. Chloride^(ppm), July 23, 1954, 292; Dec. 15, 1955, 214; Apr.
12, 1957, 300.

(Well 91, continued)

CHEMICAL ANALYSIS ^{1/}

Silica (SiO ₂)	1.5
Aluminum (Al)	0.02
Iron (Fe)	0.01
Manganese (Mn)	0.00
Calcium (Ca)	96.8
Magnesium (Mg)	18.4
Sodium (Na)	169
Bicarbonate (HCO ₃)	283
Sulfate (SO ₄)	38.9
Chloride (Cl)	292(?)
Phosphate (PO ₄)	0
Dissolved Solids	830
Total Hardness (as CaCO ₃)	318
Alkalinity (M.O.)	232

^{1/} Analysis made by U.S. Navy, July 23, 1954

(Well 91, continued)

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^{1/} Analysis ~~made~~ by U.S. Navy, July 23, 1954

9-13
(February 1959)

NCS No 1

91

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

File No. ~~Washington~~
~~Field~~

Report on

Analytical Statement

Date

(ppm)

(Sign your report and note date of its preparation)

NCS No. 1 (probably well NCS 1A)

Location: Guam, M. I.

Date of collection: May 14, 1952

Source: Drilled well

Use PS

SiO₂ 1.4

Temp (°F) 80

Fe .04

480' deep, 10" in diameter.

Color 5 pH 7.4

Ca 86

Owner: U.S. Navy.

Suspended matter

Mg 34

1' BF - limestone. W - 450' surf.

Hardness as CaCO₃

Na 238

Casing - steel 450'. Yield 500gpm

NC 158 Total 354

K 9.2

Stream bed project. Appearance -

Ions per acre-ft 1,040

CO₂ 0

Clear.

Spec. cond. at 25°C

HCO₃ 240

(micromhos) 1.860

SO₄ 60

Cl 431

F 0

Phosphate (PO₄)

0.1 NO₃ 4.9

Ions per acre-ft

1.34 B .25

Sum 983

Chemist N. L. Jensen

Lab No. SL City 8883

Collector JWB

Copied from Copy of original record

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. Joseph W. Brookhart

DATE: September 16, 1955

FROM : K. J. Takasaki

SUBJECT: Comments on NCS Well 1A (Well 119)

I keep wondering about the remarks in your tables for Well 119 i.e. "Excessive measured drawdown probably due to entrance loss and may not represent drawdown in aquifer." The Navy pulled the pump from this well about two months ago for repairs so I had a chance to put in a recorder for about 48 hours. The fluctuation in the well measured less than 0.10 feet which confirms the 24-hour static water-level measurements made by OINCC on May 26, 1954. From the records the fluctuation in nearby Well 118 appears to average about 0.50 feet. I would have been satisfied with your remarks if the fluctuations in both wells were in the same order of magnitude. For basal-water wells I think even with poor surging and insufficient slotting of the casing, tidal fluctuation would not be dampened because of the period of the ocean tides which is measured in hours. A thought of a less permeable barrier between sea water and the effective infiltration area of the aquifer came to mind but this was only lightly regarded because the available records show a higher chloride content for Well 119. Couldn't it be that Well 119 was drilled to an aquifer of less permeability than the aquifer of Well 118? We find this to be rather consistent for basal-water wells on Oahu in the Hawaiian Islands. That is for wells close together drilled in aquifers of similar rock types with comparable depths below sea level, distances from recharge area, and distances from sea shore; it is usually the wells with the more permeable aquifers which are sweeter (lower chloride content).

In comparing wells close together in Guam, have you noticed any relationship between tidal fluctuation in wells and well productivity (drawdown and/or permeability)? Also with chloride content? When you have time, I would appreciate comments from you and Dan on this.

Kiyoshi J. Takasaki

cc: Davis

Guam 7/1/56

Location: 667-011

91

SEP 22 1955

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. Joseph W. Brookhart

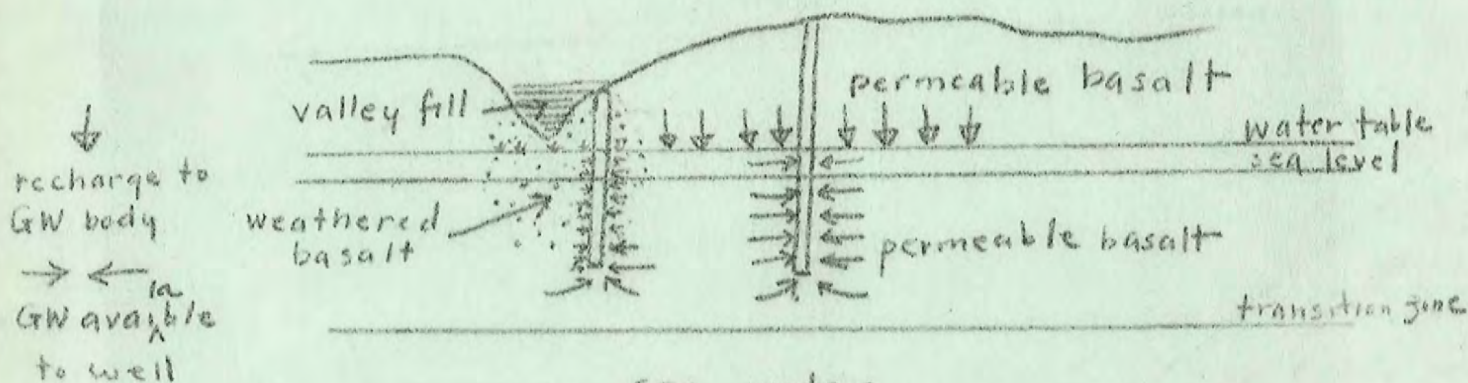
DATE: September 20, 1955

FROM : K. J. Takasaki, Guam

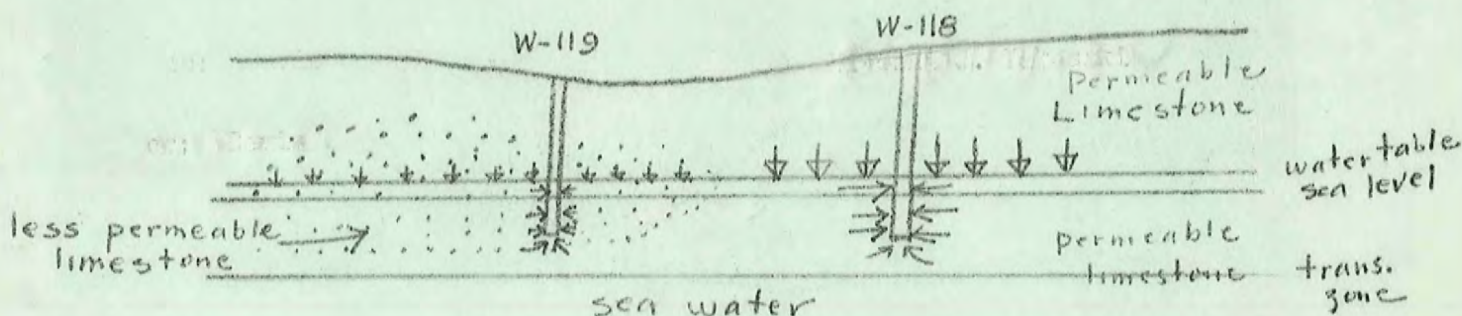
SUBJECT: NCS Well 1A (Well 119)

The last two sentences in the first paragraph of my memo to you on comments NCS Well 1A dated September 16, 1955 should be changed to read:

"On the island of Oahu in the Hawaiian Islands where the Ghyben-Herzberg lens is well developed, it has been my experience to note that the water in the upper part of the lens is usually sweeter (less chloride content) in wells penetrating a more permeable aquifer than in nearby wells penetrating a less permeable aquifer in the upper part of the lens. The term, upper part of the lens, should be restricted physically to the way it appears in a well or shaft."



SEA WATER
PROBABLE CONDITION ON OAHU



CONDITION AT WELL 119 and 118?

Kiyoshi J. Takasaki

: Davis

91
~~772~~
 OINCC FIELD OFFICE
 N.R.S. FINEGAYAN

Proj. 272

June 8, 1954

Well No. 1-A

Sea Level 429.014.58 = 429.59 M.L.L.W.

Draw down Test under Supervision of U. S. Geological Survey

Static Test 0900 Tape 445' = 426.10

24 Hrs. at 250 GPM

<u>Time</u>	<u>Meas. Point</u>	<u>Water Level</u>	<u>Depth</u>	<u>Dr. Down</u>
1000	445	15.89	429.11	3.01
1100	"	15.84	429.16	3.06
1200	"	15.78	429.22	3.12
1300	"	16.00	429.00	2.90
1400	"	15.83	429.17	3.07
1500	"	15.75	429.25	3.15
1600	"	15.65	429.35	3.25
1700	"	15.70	429.30	3.20
1800	"	15.65	429.35	3.25
1900	"	15.80	429.20	3.10
2000	"	15.53	429.47	3.37
2100	"	15.45	429.55	3.45
2200	"	15.50	429.50	3.40
2300	"	15.51	429.49	3.39
2400	"	15.80	429.20	3.10
0100	"	15.62	429.38	3.28
0200	"	15.88	429.12	3.02
0300	"	15.97	429.03	2.93
0400	"	15.82	429.18	3.08
0500	"	15.78	429.22	3.12
0600	"	15.90	429.10	3.00
0700	"	16.10	428.90	2.80
0800	"	15.65	429.35	3.25
0900	"	15.44	429.26	3.16
M.H.H.W. = 427.29				
M.H.W. = 427.39				
M.S.L. = 428.24 (Low Pumping Level)				
M.L.W. = 428.99				
M.L.L.W. = 429.59				

Construction Supt.

1192

OINCC FIELD OFFICE
N.R.S. FINEGAYEN

Proj. 272

June 7-8, 1954

Well No. 1-A

Sea Level 429.014.58 = 429.59 M.L.L.W.

Draw down Test under Supervision of U. S. Geological Survey

Static Test 0900 Tape 445' = 426.10

24 Hrs. at 200 GPM

<u>Time</u>	<u>Meas. Point</u>	<u>Water Level</u>	<u>Depth</u>	<u>Dr. Down</u>
1000	445	16.70	428.83	2.73
1100	"	15.90	429.10	3.00
1200	"	16.08	428.92	2.82
1300	"	16.90	428.10	2.00
1400	"	17.10	427.90	1.80
1500	"	17.15	427.85	1.75
1600	"	17.12	427.88	1.78
1700	"	17.03	427.97	1.87
1800	"	17.05	427.95	1.85
1900	"	17.02	427.98	1.88
2000	"	16.94	428.06	1.96
2100	"	16.95	428.05	1.95
2200	"	17.00	428.00	1.90
2300	"	16.95	428.05	1.95
2400	"	17.03	427.97	1.87
June 8				
0100	"	17.09	427.91	1.81
0200	"	16.97	428.03	1.93
0300	"	17.18	427.82	1.72
0400	"	17.30	427.70	1.60
0500	"	17.21	427.79	1.69
0600	"	17.15	427.85	1.75
0700	"	17.27	427.73	1.63
0800	"	17.09	427.91	1.81
0900	"	16.79	428.21	2.11

M.H.H.W. = 427.29

M.H.W. = 427.39

M.S.L. = 428.24 (Low Pumping Level)

M.L.W. = 428.99

M.L.L.W. = 429.59

200 G.P.M. suggested for service at this date by Mr. Brookhart, U.S. Geological Survey. Contr. requested by FCR to install removable Orifice plate to supply 200 G.P.M.

Salinity test by U. S. Geological Survey is 300 ppms June 4, 1954

Construction Supt.

W. C. S. FINEGAYEN

WEYL 1-A

Sea Level 429.014.58 = 429.59

Tape Reading at

Date	Hour	Well No.	Tape Reading at		Depth to Water	Remarks
			Meas. Point	Water Level		
6/4/54	9:30	1-A	445	19.65	435.35	Static Test
At 100 GPM						
6/4/54	10:00	1-A	445	18.67	426.33	D.D. = -.98
6/4/54	10:30	1-A	445	18.82	426.18	D.D. = -.15
6/4/54	11:00	1-A	445	18.50	426.50	D.D. = -.32
6/4/54	11:30	1-A	445	18.48	426.52	D.D. = -.02
2 hr. total dr. dn. at 100 GPM = -1.17						
At 200 G.P.M.						
6/4/54	1200	1-A	445	17.33	427.67	D.D. = -1.15
6/4/54	1230	1-A	445	17.06	427.94	D.D. = -.27
6/4/54	1300	1-A	445	17.26	427.74	D.D. = .20
6/4/54	1330	1-A	445	17.22	427.78	D.D. = -.04
2 hr. total dr. dn. at 200 GPM = 1.26						
At 250 C.P.M.						
6/4/54	1400	1-A	445	15.78	429.22	D.D. = -1.44
6/4/54	1430	1-A	445	15.84	429.16	D.D. = .06
6/4/54	1500	1-A	445	15.69	429.31	D.D. = -.15
6/4/54	1530	1-A	445	15.73	429.27	D.D. = .04
2 hr. total dr. dn. at 250 GPM						
Total draw down for 6 hours = 3.92						
At 300 G.P.M.						
6/4/54	1600	1-A	445	12.65	432.35	D.D. = -3.08
6/4/54	1630	1-A	445	12.62	432.38	D.D. = -.03
6/4/54	1700	1-A	445	12.48	432.52	D.D. = -.14
6/4/54	1730	1-A	445	12.56	432.44	D.D. = .08
2 hr. total dr. dn. at 300 GPM = -3.17						
At 350 G.P.M.						
6/4/54	1800	1-A	445	7.38	437.62	D.D. = -5.18
6/4/54	1830	1-A	445	7.40	437.60	D.D. = .02
6/4/54	1900	1-A	445	7.28	437.72	D.D. = -.12
6/4/54	1930	1-A	445	7.07	437.93	D.D. = .21
2 hr. total dr. dn. at 350 GPM = 5.49						
At 400 G.P.M.						
6/4/54	2000	1-A	445	5.54	439.46	D.D. = 1.53
6/4/54	2030	1-A	445	5.50	439.50	D.D. = -.04
6/4/54	2100	1-A	445	5.56	439.44	D.D. = .06
6/4/54	2130	1-A	445	5.56	439.44	D.D. = 0.00
2 hr. total dr. dn. at 400 GPM = 1.51						
Total drawdown last 6 hours = 10.17						
Total drawdown first 6 hours = 3.92						
Total drawdown for 12 hours = 14.09						

N S
Finogagen well 1A

1192

Date	Hour	Meas. Point	Water Level	Depth to Water	Remarks
5/28/54	0100	450	19.31	430.69	781,000
	0200	"	18.75	431.25	794,000
	0300	"	18.73	431.27	807,000
	0400	"	18.95	431.05	819,000
	0500	"	19.87	430.13	831,000
	0600	"	19.95	430.05	843,000
	0700	"	20.03	429.97	855,000
	0800	"	19.97	430.03	867,000
	0900	"	19.91	430.09	879,000
	0910	460	18.65	441.35	
		460	18.59	441.41	

Now back washing and surging by pumping intermittently every 30 minutes until water clears up.

Top of casing 429.01

Top of meas. pipe 429.59

(Steel tape starts at 15.0', broken off)

Last test 5/28/54 at 09³⁰

Mark on tape 460

Water Level - 18.59

Depth to water 441.41

Actual meas ^{point} ~~depth~~ 429.59

Actual drawdn 11.82 at 400 gpm

Signed
C.R. Walsh

1897 Finagayan Well 1A

(Copied from U.S.G.S. Field Notebook at Oice Field office)

Date	Hour	Meas. Point	Water Level	Depth to Water	Remarks
5/27/54	0855	450	24.06	425.94	582,000
	0902	"			Pump on 200 gpm
	0910	"	18.87	431.13	583,500
	0930	"	18.80	431.20	
	0945	"	18.78	431.22	595,000
	1100	"	18.56	431.44	607,000
	1200	"	18.30	431.70	620,500
	1300	"	18.24	431.76	634,000
	1400	"	18.12	431.88	649,500
	1500	"	20.60	429.40	659,000
	1600	"	20.61	429.39	670,000
	1700	"	20.89	429.11	682,000
	1800	"	18.64	431.46	694,000
	1900	"	20.04	429.16	705,000
	2000	"	19.81	430.19	710,000
	2100	"	17.66	432.34	730,000
	2200	"	17.74	432.26	742,000
	2300	"	18.40	431.00	754,000
	2400	"	18.23	431.77	770,000

represent height of water above bottom of foot valve

represents distance to water from the meas. point. In order words, any depth here below 429.54 represents a water level below MLLW.

OINCC FIELD OFFICE
N.R.S. FINEGAYEN

Proj: 272

May 26, 1954

Well No. 1-A

Sea Level 429.014.58 = 429.59 M.L.L.W.

24 Hrs. Static Test under Supervision of U. S. Geological Survey

Time	Meas. Point	Water Level	Depth
9:00	450.00	24.04	425.96
10:00	"	24.04	425.96
11:00	"	24.05	425.95
12:00	"	24.06	425.94
1:00	"	24.03	425.97
2:00	"	24.05	425.95
3:00	"	24.06	425.94
4:00	"	24.03	425.97
5:00	"	24.02	425.98
6:00	"	24.01	425.99
7:00	"	24.00	426.00
8:00	"	24.00	426.00
9:00	"	24.09	425.91
10:00	"	24.09	425.91
11:00	"	24.09	425.91
12:00	"	24.09	425.91

May 27, 1954

1:00	"	24.09	425.91
2:00	"	24.00	426.00
3:00	"	24.01	425.99
4:00	"	24.00	426.00
5:00	"	24.00	426.00
6:00	"	24.09	425.91
7:00	"	24.08	425.92
8:00	"	24.08	425.92

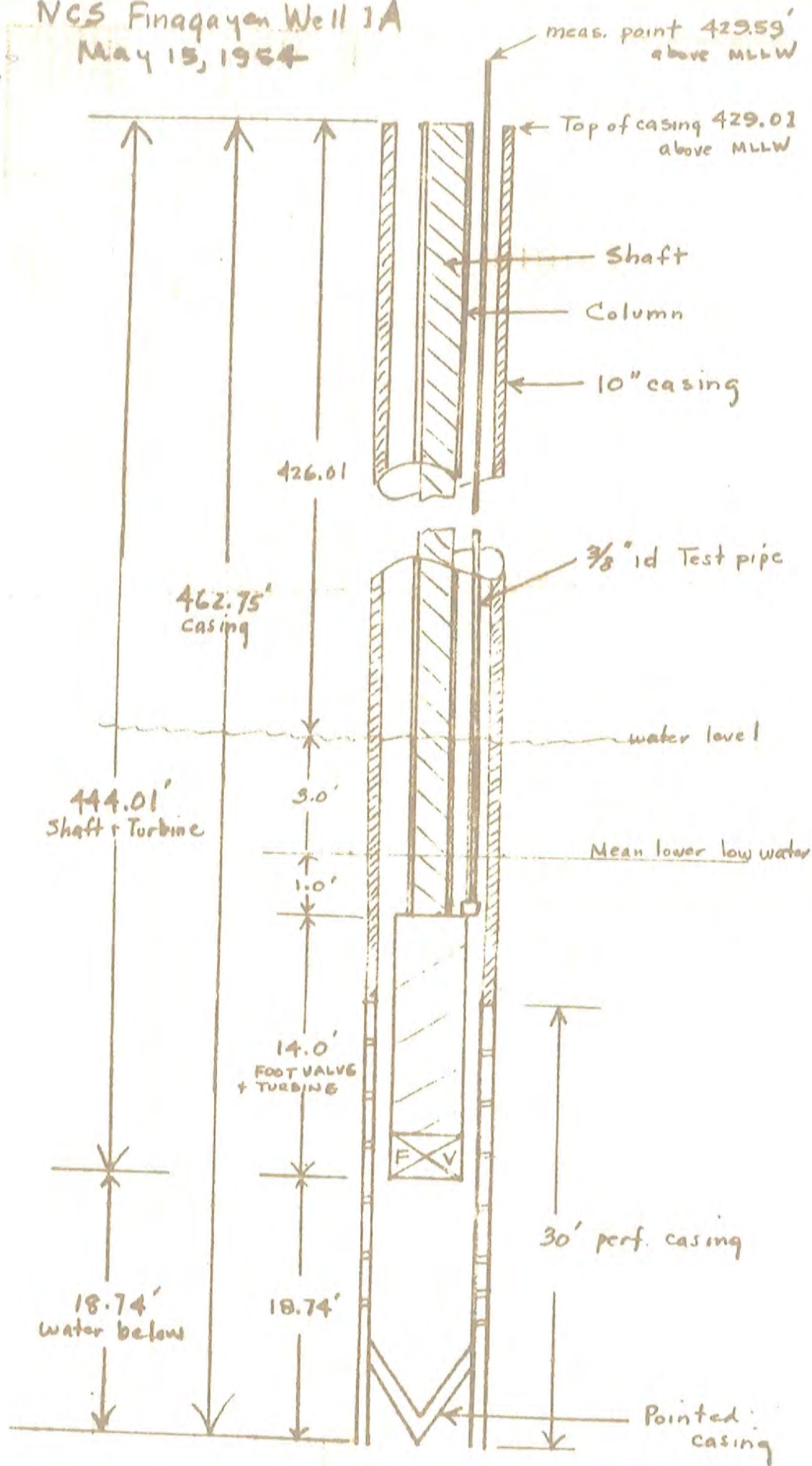
M.H.H.W. = 427.29
M.H.W. = 427.39
M.S.L. = 428.24 (Low Pumping Level)
M.L.W. = 428.99
M.L.L.W. = 429.59

Construction Supt.

119.

NCS Finagayan Well 1A

May 15, 1954



Copied from
NCS Field notes

NCS Finegayan

Well 119 ?

Note: I spent some time trying to locate well 119 as plotted on Brookhart's water resources map. There are 3 wells in the vicinity but none of them fit the description given for Well 199 in the tables. The 3 wells are: (See Quad. Yigo SE)

- (a) NCS #1 (Well 118)
- (b) NCS #1-A (Well 119 is plotted where this well should be)
- (c) NCS Grounding Well

I am surprised at this mix-up because it was Joe who recommended that an orifice be put on the pump, restricting its capacity to 200 g.p.m. ^A
on well 1A

There is a well called NCS #2 but this is at the old station about 1.8 miles southwest on Route 3.

NCS Well 1A

K. J. Takasaki.

(7-8-55)

* 7/13/55 Water level meas. (9:15 a.m.)
429.01' top of casing above MLLW
less 425.28' distance to water from top of casing
3.73' feet, water level above M.L.L.W. (Takasaki & Quinata)

7/14/55 Recorder installed to determine tidal fluctuation.
Water level meas. (3:30 p.m.)
429.01
425.38
3.63 feet, water level above msl. (Quinata)

* Recorder chart indicates very small tidal fluctuation (less than 0.10 ft.)
Pump was ~~removed at this date~~ ^{taken out on July 11, 1955} to remove orifice restricting pumpage to 200 gpm. Pumping test to follow at a later date to determine if this rate can be increased to 400 gpm.

OINCC FIELD OFFICE
N.R.S. FINEGAYAN

June 8, 1954

Proj. 272

Well No. 1-A

Sea Level 429.01/.58 = 429.59 M.L.L.W.

Draw down Test under Supervision of U. S. Geological Survey

Static Test 0900 Tape 445' = 426.10

24 Hrs. at 250 GPM

Time	Meas. Point	Water Level	Depth	Dr. Down
1000	445	15.89	429.11	3.01
1100	"	15.84	429.16	3.06
1200	"	15.78	429.22	3.12
1300	"	16.00	429.00	2.90
1400	"	15.83	429.17	3.07
1500	"	15.75	429.25	3.15
1600	"	15.65	429.35	3.25
1700	"	15.70	429.30	3.20
1800	"	15.65	429.35	3.25
1900	"	15.80	429.20	3.10
2000	"	15.53	429.47	3.37
2100	"	15.45	429.55	3.45
2200	"	15.50	429.50	3.40
2300	"	15.51	429.49	3.39
2400	"	15.80	429.20	3.10
0100	"	15.62	429.38	3.28
0200	"	15.88	429.12	3.02
0300	"	15.97	429.03	2.93
0400	"	15.82	429.18	3.08
0500	"	15.78	429.22	3.12
0600	"	15.90	429.10	3.00
0700	"	16.10	428.90	2.80
0800	"	15.65	429.35	3.25
0900	"	15.74	429.26	3.16

M.H.H.W. = 427.29

M.H.W. = 427.39

M.S.L. = 428.24

M.L.W. = 428.99

M.L.L.W. = 429.59

(Low Pumping Level)

Construction Supt.

OINCC FIELD OFFICE
N.R.S. FINEGAYEN

Proj. 272

June 7-8, 1954

Well No. 1-A

Sea Level 429.01/.58 = 429.59 M.L.L.W.

Draw down Test under Supervision of U. S. Geological Survey

Static Test 0900 Tape 445' = 426.10

24 Hrs. at 200 GPM

<u>Time</u>	<u>Meas. Point</u>	<u>Water Level</u>	<u>Depth</u>	<u>Dr. Down</u>
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1100	"	15.90	429.10	3.00
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1300	"	16.90	428.10	2.00
1400	"	17.10	427.90	1.80
1500	"	17.15	427.85	1.75
1600	"	17.12	427.88	1.78
1700	"	17.03	427.97	1.87
1800	"	17.05	427.95	1.85
1900	"	17.02	427.98	1.88
2000	"	16.94	428.06	1.96
2100	"	16.95	428.05	1.95
2200	"	17.00	428.00	1.90
2300	"	16.95	428.05	1.95
2400	"	17.03	427.97	1.87
June 8				
0100	"	17.09	427.91	1.81
0200	"	16.97	428.03	1.93
0300	"	17.18	427.82	1.72
0400	"	17.30	427.70	1.60
0500	"	17.21	427.79	1.69
0600	"	17.15	427.85	1.75
0700	"	17.27	427.73	1.63
0800	"	17.09	427.91	1.81
0900	"	16.79	428.21	2.11

M.H.H.W. = 427.29

M.H.W. = 427.39

M.S.L. = 428.24 (Low Pumping Level)

M.L.W. = 428.99

M.L.L.W. = 429.59

200 G.P.M. suggested for service at this date by Mr. Brookhart, U.S. Geological Survey. Contr. requested by FCR to install removable Orifice plate to supply 200 G.P.M.

Salinity test by U. S. Geological Survey is 300 ppms June 4, 1954

Construction Supt.

N.C.S. FINEGAYEN

WELL 1-A

Sea Level $429.014.58 = 429.59$

Tape Reading at

Date	Hour	Well No.	Meas. Point	Water Level	Depth to Water	Remarks
6/4/54	9:30	1-A	445	19.65	435.35	Static Test
At 100 GPM						
6/4/54	10:00	1-A	445	18.67	426.33	D.D. = -.98
6/4/54	10:30	1-A	445	18.82	426.18	D.D. = $\cancel{f}.15$
6/4/54	11:00	1-A	445	18.50	426.50	D.D. = -.32
6/4/54	11:30	1-A	445	18.48	426.52	D.D. = -.02
2 hr. total dr. dn. at 100 GPM = -1.17						
At 200 G.P.M.						
6/4/54	1200	1-A	445	17.33	427.67	D.D. = -1.15
6/4/54	1230	1-A	445	17.06	427.94	D.D. = -.27
6/4/54	1300	1-A	445	17.26	427.74	D.D. = $\cancel{f}20$
6/4/54	1330	1-A	445	17.22	427.78	D.D. = -04
2 hr. total dr. dn. at 200 GPM = 1.26						
At 250 G.P.M.						
6/4/54	1400	1-A	445	15.78	429.22	D.D. = -1.44
6/4/54	1430	1-A	445	15.84	429.16	D.D. = $\cancel{f}.06$
6/4/54	1500	1-A	445	15.69	429.31	D.D. = -.15
6/4/54	1530	1-A	445	15.73	429.27	D.D. = $\cancel{f}04$
2 hr. total dr. dn. at 250 GPM						
Total draw down for 6 hours = 3.92						
At 300 G.P.M.						
6/4/54	1600	1-A	445	12.65	432.35	D.D. = -3.08
6/4/54	1630	1-A	445	12.62	432.38	D.D. = -.03
6/4/54	1700	1-A	445	12.48	432.52	D.D. = -.14
6/4/54	1730	1-A	445	12.56	432.44	D.D. = $\cancel{f}.08$
2 hr. total dr. dn. at 300 GPM = -3.17						
At 350 G.P.M.						
6/4/54	1800	1-A	445	7.38	437.62	D.D. = -5.18
6/4/54	1830	1-A	445	7.40	437.60	D.D. = $\cancel{f}02$
6/4/54	1900	1-A	445	7.28	437.72	D.D. = -.12
6/4/54	1930	1-A	445	7.07	437.93	D.D. = $\cancel{e}21$
2 hr. total dr. dn. at 350 GPM = 5.49						
At 400 G.P.M.						
6/4/54	2000	1-A	445	5.54	439.46	D.D. = 1.53
6/4/54	2030	1-A	445	5.50	439.50	D.D. = -.04
6/4/54	2100	1-A	445	5.56	439.44	D.D. = $\cancel{f}06$
6/4/54	2130	1-A	445	5.56	439.44	D.D. = 0.00

2 hr. total dr. dn. at 400 GPM = 1.51

Total drawdown last 6 hours = 10.17

Total drawdown first 6 hours = 3.92

Total drawdown for 12 hours = 14.09

Finegayan Well 1A

(Copied from U.S.G.S. Field Notebook at OICC Field Office)

Date	Hour	Meas. Point	Water Level	Depth to Water	Remarks
5/27/54	0855	450	24.06	425.94	582,000
	0902	"			Pump on 200 gpm
	0910	"	18.87	431.13	583,500
	0930	"	18.80	431.20	
	0945	"	18.78	431.22	595,000
	1100	"	18.56	431.44	607,000
	1200	"	18.30	431.70	620,500
	1300	"	18.24	431.76	634,000
	1400	"	18.12	431.88	649,500
	1500	"	20.60	429.40	659,000
	1600	"	20.61	429.39	670,000
	1700	"	20.89	429.11	682,000
	1800	"	18.64	431.46	694,000
	1900	"	20.04	429.96	705,000
	2000	"	19.81	430.19	716,000
	2100	"	17.66	432.34	730,000
	2200	"	17.74	432.26	742,000
	2300	"	18.40	431.60	754,000
	2400	"	18.23	431.77	770,000

represent height of water above bottom of foot valve
 represents distance to water from the meas. point. In order words, any depth here below 429.59 represents a water level below MLLW

NCS Finegayan Well 1A

119.2

Date	Hour	Meas. Point	Water Level	Depth to Water	Remarks
5/28/54	0100	450	19.31	430.69	781,000
	0200	"	18.75	431.25	794,000
	0300	"	18.73	431.27	807,000
	0400	"	18.95	431.05	819,000
	0500	"	19.87	430.13	831,000
	0600	"	19.95	430.05	843,000
	0700	"	20.03	429.97	855,000
	0800	"	19.97	430.03	867,000
	0900	"	19.91	430.09	879,000
	0910	460	18.65	441.35	
		460	18.59	441.41	

Now backwashing and surging by pumping intermittently every 20 minutes until water clears up

Top of casing 429.01

Top of meas. pipe 429.59

(Steel tape starts at 15.0', broken off)

Last test 5/28/54 at 09³⁰

Mark on tape 460

Water Level - 18.59

Depth to water 441.41

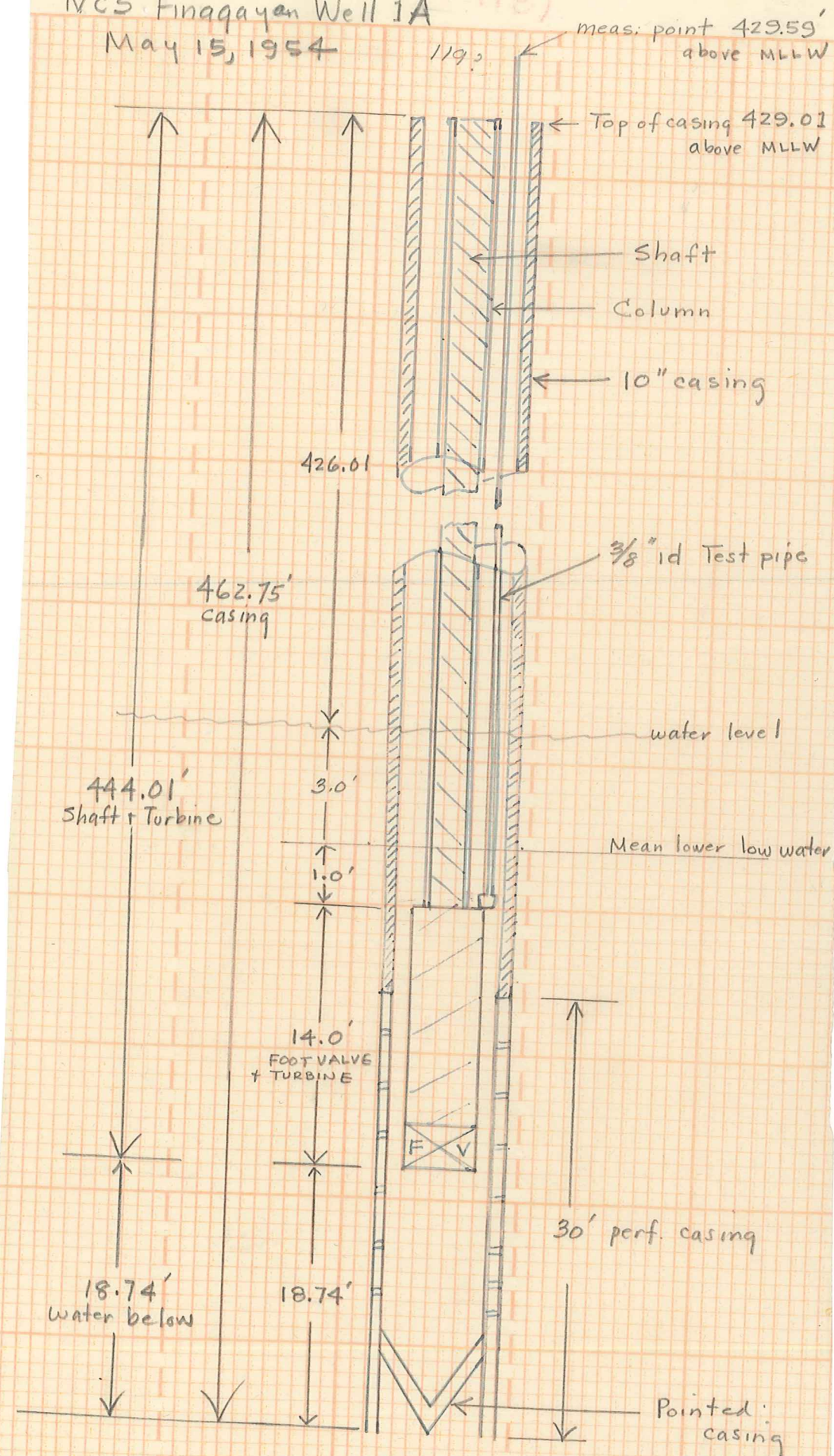
Actual meas. ^{point} 429.59

Actual drawdn 11.82 at 400 gpm

Signed
C.P. Walsh

NCS Finagayan Well 1A

May 15, 1954



Copied from
OINCC Field office
KUTAKASHI

119.7

OINCC FIELD OFFICE
N.R.S. FINEGAYAN

Proj. 272

May 26, 1954

Well No. 1-A

Sea Level 429.01/.58 = 429.59 M.L.L.W.

24 Hrs. Static Test under Supervision of U. S. Geological Survey

Time	Meas. Point	Water Level	Depth
9:00	450.00	24.04	425.96
10:00	"	24.04	425.96
11:00	"	24.05	425.95
12:00	"	24.06	425.94
1:00	"	24.03	425.97
2:00	"	24.05	425.95
3:00	"	24.06	425.94
4:00	"	24.03	425.97
5:00	"	24.02	425.98
6:00	"	24.01	425.99
7:00	"	24.00	426.00
8:00	"	24.00	426.00
9:00	"	24.09	425.91
10:00	"	24.09	425.91
11:00	"	24.09	425.91
12:00	"	24.09	425.91

May 27, 1954

1:00	"	24.09	425.91
2:00	"	24.00	426.00
3:00	"	24.01	425.99
4:00	"	24.00	426.00
5:00	"	24.00	426.00
6:00	"	24.09	425.91
7:00	"	24.08	425.92
8:00	"	24.08	425.92

M.H.H.W. = 427.29

M.H.W. = 427.39

M.S.L. = 428.24 (Low Pumping Level)

M.L.W. = 428.99

M.L.L.W. = 429.59

Construction Supt.

← represents distance to water from measuring point.
For water levels above M.L.L.W. subtract these figures from 429.59.

Well 119 ?

Note: I spent some time trying to locate well 119 as plotted on Brookhart's water resources map. There are 3 wells in the vicinity but none of them fit the description given for Well 199 in the tables. The 3 wells are: (See Quad. Yigo SE)

- (a) NCS #1 (Well 118)
- (b) NCS #1-A (Well 119 is plotted where this well should be)
- (c) NCS Grounding Well

I am surprised at this mix-up because it was Joe who recommended that an orifice be put on the pump restricting its capacity to 200 g.p.m.

on well 1A

There is a well called NCS #2 but this is at the old station about 1.8 miles southwest on Route 3.

NCS Well 1A

K. J. Takasaki

(7-8-55)

* 7/13/55 Water level meas. (9:15 a.m.)

429.01' top of casing above MLLW
 less 425.28' distance to water from top of casing
 3.73' feet, water level above M.L.L.W. (Takasaki & Quinata)

7/14/55 Recorder installed to determine tidal fluctuation.
 Water level meas. (3:30 p.m.)

429.01
 425.38
 3.63 feet, water level above msl. (Quinata)

* Recorder chart indicates very small tidal fluctuation (less than 0.10 ft.)

Pump was ~~removed at this date~~ ^{taken out on July 11, 1955} to remove orifice restricting pumpage to 200 gpm. Pumping test to follow at a later date to determine if this rate can be increased to 400 gpm.