

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

WELL I.D. # L 40427 START CARD # 132773

Instructions for completing this report are on the last page of this form.

(1) LAND OWNER: City of Portland, Well Number 36, Address 1120 SW 5th Ave, City PORTLAND, State OR, Zip 97204

(2) TYPE OF WORK: [X] New Well, [] Deepening, [] Alteration, [] Abandonment

(3) DRILL METHOD: [X] Rotary Air, [] Rotary Mud, [] Cable, [] Auger, [] Other

(4) PROPOSED USE: [] Domestic, [X] Community, [] Industrial, [] Irrigation, [] Thermal, [] Injection, [] Livestock, [] Other

(5) BORE HOLE CONSTRUCTION: Special Construction approval [X] Yes [] No, Depth of Completed Well 521.5 ft, Explosives used [] Yes [X] No

Table with columns: HOLE Diameter, From, To, Material, SEAL From, To, Sacks or pounds. Includes entries for 28" and 34" diameters with cement and bent chips.

How was seal placed: Method [] A [] B [X] C [] D [] E. Backfill placed from 0 ft. to 60 ft. Material Cement. Gravel placed from 60 ft. to 521.5 ft. Size of gravel 20".

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Includes entries for 24" and 20" casing.

Drive Shoe used [] Inside [] Outside [] None. Final location of shoe(s) 521.5

(7) PERFORATIONS/SCREENS: Table with columns: From, To, Slot size, Number, Diameter, Tele/pipe size, Casing, Liner. Includes entries for 378-395, 395-398, 398-510, and 510-521.5.

(8) WELL TESTS: Minimum testing time is 1 hour. Table with columns: Pump, Bailer, Air, Artesian, Yield gal/min, Drawdown, Drill stem at, Time. Includes test results for 1200-3000 and 3046 yield.

Temperature of water 57°. Depth Artesian Flow Found 97'. Was a water analysis done? [X] Yes By whom City of Portland. Did any strata contain water not suitable for intended use? [] Too little. [] Salty, [] Muddy, [] Odor, [] Colored, [] Other.

(9) LOCATION OF WELL by legal description: County Multnomah, Latitude, Longitude, Township 1 N or S Range 3 E or W. WM. Section 19 SW 1/4 NE 1/4. Tax Lot 1300, Lot, Block, Subdivision. Street Address of Well (or nearest address) 16400 NE AIRPORT WAY PORTLAND

(10) STATIC WATER LEVEL: 15 ft. below land surface. Date 4-25-01. Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES: Table with columns: From, To, Estimated Flow Rate, SWL. Includes entries for 20, 220, and 386.

(12) WELL LOG: Ground Elevation

Table with columns: Material, From, To, SWL. Includes handwritten note 'See Attached FORMATION Log' and a 'RECEIVED JAN 10 2002 WATER RESOURCES DEPT. SALEM, OREGON' stamp.

Date started 12-12-00 Completed 4-25-01

(unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief. WWC Number 1523, Signed [Signature], Date 1/8/02

(bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief. WWC Number 1464, Signed [Signature], Date 1/8/02

RECEIVED

STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 511.740)

Instructions for completing WATER RESOURCES DEPARTMENT Form 511-200

MAY 21 2001

Amendment

WELL I.D. # L 40227
START CARD # 132774

(1) LAND OWNER

Name: City of Astoria Water Center Well Number: 512
Address: 120 S.W. 5th Ave. Rm 825
City: Astoria State: OR ZIP Code: 97103

(2) TYPE OF WORK

 New Well Deepening Alteration (repair or replacement)

(3) DRILL METHOD:

 Rotary Air Rotary Mud Cable Auger

(4) PROPOSED USE:

 Domestic Community Industrial Irrigation

(5) BORE HOLE CONSTRUCTION:

Special Construction approval: Yes No Depth of Completed Well: 520
Explosives used: Yes No Type: _____ Amount: _____

MATERIAL		SEAL		SACKS or pounds	
Bladder	From To	Material	From To		
28	28	60 Cement	0	60	3
24	60	378 Cement	10	380	327
20	387	521			

Hole was sealed placed Method: A B C D E Other: _____

Backfill placed from _____ ft. to _____ ft. Material: _____

Gravel placed from _____ ft. to _____ ft. Size of gravel: _____

(6) CASING/LINER:

Casing	Bladder	From To	Gauge	Steel	Plastic	Welded	Threaded
	24	24	60	1		2	
	4	378		1			
	20	387	521	1			

Liner: _____

Drive Shoe used: Inside Outside None

Final location of shoe(s): _____

(7) PERFORATIONS/SCREENS:

 Perforations MethodIf Screens: Type: Wire Material: SS

From	To	Slot size	Number	Diameter	Telescope size	Casing	Liner
378	393	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
353	378			12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
398	510	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
510	520			12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

 Pump Boiler Air Flowing Artesian

Yield gallons	Drawdown	Drift area at	Time
1200	32	370	1 hr
3046	104	370	2.8 hr
3000	37	370	1 hr

Temperature of water: 51° Depth Artesian Pipe Found: _____Was a water analysis done? Yes No By whom: ClientDid any strata contain water not suitable for intended use? Too little Salty Muddy Odor Colored Other: _____

Depth of strata: _____

(9) LOCATION OF WELL, by legal description:

County: Clatsop Township: 3 Range: 3 Section: 19 Block: 26 Subdivision: 14Tax Lot: 130 Street Address of Well or nearest address: 16400 NE Astoria Way

(10) STATIC WATER LEVEL:

_____ ft. below land surface Date: 4-25-01

(11) WATER BEARING ZONES:

Antenna pressure: _____ lb. per square inch Date: _____

(12) WELL LOG:

From	To	Estimated Flow Rate	SWL
20	175	N/A	N/A
220	380	N/A	N/A
386	521	3000 GPM	15'

(12) WELL LOG:

Ground Elevation: _____

Material	From	To	SWL
Silt Brown	0	10	
Silt Brown w/ sh. sand gravel	10	20	
Gravel from sh. coarse	20	114	
Gravel and coarse gravel	114	145	
Clay silt gravel	145	165	
Silt clay gravel	165	195	
Clay Brown	195	200	
Sand Fine med. blk	200	215	
Silt gravel fine blk	215	270	
Sand stone coarse gravel	270	285	
Sand gravel	285	330	
Clay silt gravel gravelly	330	386	
Sand fine gravel	386	375	
Gravel-sand gravel blk	375	400	
Sand gravel fine med	400	414	
Gravel med. blk gravel	414	422	
Gravel med. blk gravel	422	450	
Sand gravelly fine blk	450	466	
Sand gravel med	466	521	

Date started: 12/1/00 Completed: 4/25/01

(Inscribed) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. My signature and seal are as indicated on this form in the box of my knowledge and skill.

Signed: [Signature] WWC Number: 1672Date: 5/18/01

(Bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and skill.

Signed: [Signature] WWC Number: 1672Date: 5/18/01

RECEIVED

STATE OF OREGON
WATER SUPPLY WELL REPORT

MAY 21 2001

WELL I.D. # L 40427
START CARD # 132773

(as required by ORS 537.765)
Instructions for completing this report are in the back of this form.

WATER RESOURCES DEPT.
SALEM, OREGON

(1) LAND OWNER
Name City of Portland Well Number 352
Address 1120 S.W. 5th Ave, Rm 825
City Portland State OR Zip 97204

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well 520
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	
28	0	60	Cement	0	60	2,337 Sacks
24	60	398	Cement	60	380	
20	389	521				

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Casing:	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
		24	14	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	20	398			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Drive Shoe used Inside Outside None
Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type V wire Material SS

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
378	393	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
393	398	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
398	510	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>
510	520	40		12"	Pipe	<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Drill stem at	Flowing Time
1200	32	370	1 hr.
3046	104	370	2.8 hrs.
3000	37	370	1 hr.

Temperature of water 57 Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom Client
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County Multnomah Latitude _____ Longitude _____
Township 1 N of S Range 3 E of W. WM.
Section 19 SW 1/4 NE 1/4
Tax Lot 130 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 16400 NE Airport Way

(10) STATIC WATER LEVEL:
15 ft. below land surface. Date 4-25-01
Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found 20'

From	To	Estimated Flow Rate	SWL
20	145	NA	NA
220	330	NA	NA
386	521	3,000 GPM	15'

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Silt brown	0	10	
Silt brown with sand gravel	10	20	
Gravel Fine to coarse	20	114	
Sand and Gravel gray	114	145	
Clay silt gray	145	165	
Silt clay gray	165	195	
Clay Brown	195	200	
Sand Fine hard black	200	215	
Silt gray gray fine sand	215	220	
Sand stone coarse gravel	220	265	
Sand - gravel	285	330	
Clay silt coarse green gray	330	386	
Sand Fine gray	386	395	
Gravel - sand gray black	395	400	
Sand gravel Fine hard	400	414	
Gravel sand dark gray	414	422	
Gravel interbedded sand	422	450	
Sand some gravel fine sand	450	466	
Sand gravel hard	466	521	

Date started 12/12/00 Completed 4/25/01

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
Signed [Signature] WWC Number 1672
Date 5/18/01

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed [Signature] WWC Number 1664
Date 5/18/01

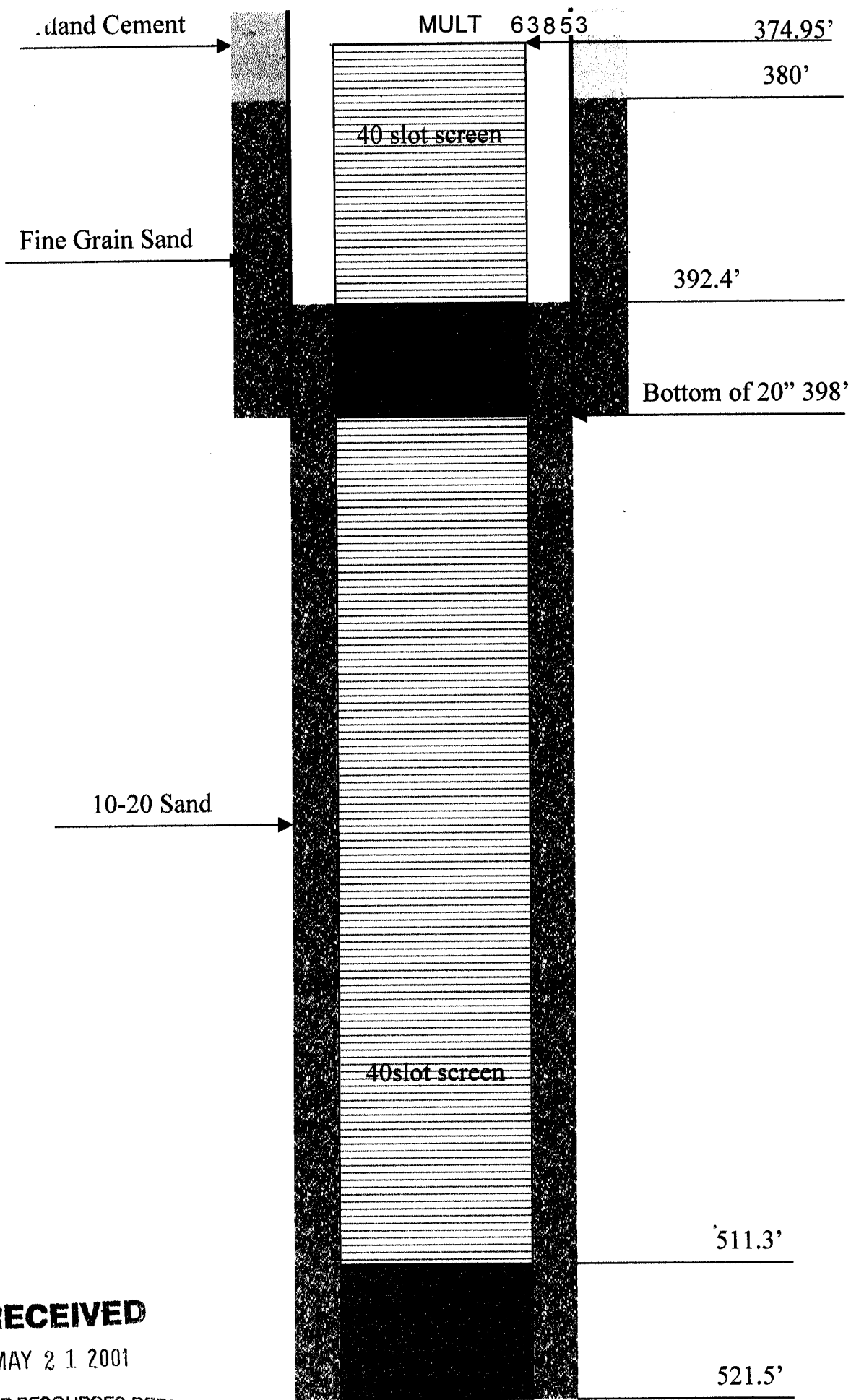
Summary Log of well #36

Silt, brown	0-10	-----	overbank deposits
Silt, brown with sand and gravel	10-20		
Gravel, dark gray basaltic, fine to coarse	20-114	-----	TGA
Gravelly sand, and sand, gray	114-145		
Gray silt and clayey silt	145-165	-----	CU1
Silty clay, gray	165-195		
Clay, brown	195-200		
Sand, black, fine to medium	200-215		
Silt, green-gray, trace fine sand	215-220		
Sand, black, coarse with gravel and sandstone	220-265	-----	TSA
Sandy gravel and gravel	285-330		
Clay, green-gray and interbedded silt	330-386	-----	CU2
Sand, gray, fine-grained	386-395	-----	SGA
Sandy gravel, gray to black	395-400		
Sand, gravelly, fine to medium	400-414		
Sandy gravel, dark gray	414-422		
Gravel and sand, interbedded	422-450		
Sand, fine to med. black with minor gravel	450-466		
Sand, medium and gravelly sand	466-521		

RECEIVED

MAY 21 2001

WATER RESOURCES DEPT
SALEM, OREGON



RECEIVED

MAY 21 2001

WATER RESOURCES DEPT.
SALEM, OREGON