WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

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DO NOT WRITE ON BACK

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No. 78633
Permit No.
Basin 212

NOTICE OF INTENT NO. 19522

1. OWNER American Pacific Corp.
MAILING ADDRESS 3770 Howard Hughes Pky. Suite 300 Las Vegas, NV 89101
ADDRESS AT WELL LOCATION S/W Corner of Gibson Rd. & American Pacific Rd. Henderson, NV

2. LOCATION NE ¼ NE ¼ Sec. 15 T. 22 N/S R. 62 E. Clark County
PERMIT NO. Issued by Water Resources | Parcel No. 178-15-511-016 | Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal/Industrial ☒ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☒ Rotary ☐ RVC
☒ Air ☐ Other

6. DX-350 LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness

SEE ATTACHED DRILLING LOG

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DCNR/DWR Received JAN 21 2000

Date started November 12, 1999
Date completed November 16, 1999

7. WELL TEST DATA
TEST METHOD: ☒ Bailer ☒ Pump ☐ Air Lift

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
pump	8		clean

8. WELL CONSTRUCTION
Depth Drilled 370 Feet Depth Cased 370 Feet

HOLE DIAMETER (BIT SIZE)

	From	To
9-5/8 Inches	-0- Feet	370 Feet
Inches	Feet	Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
4.5	PVC	Sch40	-0-	370

Perforations:
Type perforation Mill Slot
Size perforation 0.020
From 350 feet to 370 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 319
Placement Method: ☒ Pumped
Bent. chips ☒ Poured 319-342
Seal Type: ☐ Neat Cement ☐ Cement Grout ☐ Concrete Grout
Bentonite Grout
Gravel Packed: ☒ Yes ☐ No
From 342 feet to 370 feet

9. WATER LEVEL
Static water level 19.59 feet below land surface
Artesian flow G.P.M. P.S.I.
Water temperature cold °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Don Stratton for Beylik Drilling
Contractor
Address 555 S. Harbor Blvd.
Contractor
La Habra, CA 90631-6124
Nevada contractor's license number issued by the State Contractor's Board 0007055A
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 2011
Signed Don Stratton
By driller performing actual drilling on site or contractor
Date January 05, 2000

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
0					B		Refer to DX270 log for detailed lithology for upper 210 feet of this borehole.
5							
10							
15							
20							
25	Bentonite grout from 4' to 319'						
30							
35							
40							
45							
50							

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THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DATE DRILLED: 11-17-99
LOGGED BY: Randy Harris
REVIEWED BY: Scott Ball

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 370.0
DIAMETER OF BORING: 9-5/8"

DRILLING METHOD: ARCH
SCREEN SIZE: 0.02"
CASING SIZE: 4"

KLEINFELDER
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
SOILS AND MATERIALS TESTING

PROJECT NUMBER 31-309302-009

PROJECT: AMPAC

MONITORING WELL

DX350

PLATE 2a

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
50							
55							
60							
65							
70							
75	Bentonite grout						
80							
85							
90							
95							
100							

DCNR/DWR
Received
JAN 24 2000
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STATE ENGINEERS OFFICE

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REVIEWED BY: Scott Ball

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MONITORING WELL

DX350

PLATE 2b

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
105							
110							
115							
120							
125	Bentonite grout						
130							
135							
140							
145							
150							

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REVIEWED BY: Scott Ball

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SCREEN SIZE: 0.02"
CASING SIZE: 4"

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MONITORING WELL

DX350

PLATE 2c

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
155							
160							
165							
170							
175	Bentonite grout						
180							
185							
190							
195							
200							

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REVIEWED BY: Scott Ball

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 370.0
DIAMETER OF BORING: 9-5/8"

DRILLING METHOD: ARCH
SCREEN SIZE: 0.02"
CASING SIZE: 4"

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MONITORING WELL

DX350

PLATE 2d

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
205							
210					GM		**SILTY GRAVEL** - with fine to coarse grained sand, very dense, wet, calcareous
215							
220							
225	Bentonite grout						
230							
235							
240					CL		**CLAY** - light olive gray, soft, damp to moist
245							
250							

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REVIEWED BY: Scott Ball

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 370.0
DIAMETER OF BORING: 9-5/8"

DRILLING METHOD: ARCH
SCREEN SIZE: 0.02"
CASING SIZE: 4"

APPROV: ____ BY: ____

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MONITORING WELL

DX350

PLATE 2e

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
255							
260							
265							
270							
275	Bentonite grout						
280							
285							
290							Ash bed deposits: **CLAY** - light olive gray (5 y 5/4), stiff, moist, moderately plastic, slightly calcareous, with occassional 1/4" nodules of cemented silt with fine sand-likely interbeds
295					ML		**CLAYEY SILT** - with fine sand, light olive gray (5 y 5/4), stiff, moist, slightly calcareous - interbeds of clayey silt and silt with fine sand, both light olive gray. Clay - soft, moist, slightly calcareous, slightly plastic; silt - hard, very calcareous, damp to dry
300							

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DATE DRILLED: 11-17-99
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REVIEWED BY: Scott Ball

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 370.0
DIAMETER OF BORING: 9-5/8"

DRILLING METHOD: ARCH
SCREEN SIZE: 0.02"
CASING SIZE: 4"

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MONITORING WELL

DX350

PLATE 2f

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
305							- Silt with fine sand, light olive gray, dense, damp, highly calcareous, little fine to medium volcanic sand, angular, brittle - 5 to 10% volcanic sand - no volcanic sand
					SM		**SILTY SAND** - fine, light olive gray, loose to dense, wet, highly calcareous
310					SP		**GRAVELLY SAND** - fine to coarse grained, fine gravel, brown (75 yr 5/4), wet, water increasing - interbeds of silt, light olive gray, dense, damp, cemented; calcareous silt stone with medium to coarse grained sand cemented in matrix;
315							- gravel decreasing to trace
320							- water decreasing, harder drilling, cemented sand with fine gravel, trace to little silt
325	Bentonite chips from 319' to 332.6'						- drilling easier, water increasing - fine sand, brown, loose, moderately calcareous
330					SW		**SAND** - fine to coarse grained, with little silt, very highly calcareous - with little gravel, brown, dense, wet
335					SP		**SAND** - fine with some silt, brown, dense, wet, very highly calcareous
340							- 30% silt
					SW		**SAND** - fine to coarse grained, with trace gravel; some silt, brown, very dense, wet, moderately calcareous
345					SP		**SAND** - with little silt, very fine, brown, wet, dense, highly calcareous
					SM		**SILTY SAND** - very fine, brown, dense, wet, highly calcareous
350					SP		**CEMENTED SAND** - with silt, brown, very dense, wet, highly calcareous - unable to drive casing any further, drill open hole - little silt, moderately calcareous

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PLATE 2g

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S. NAME	U.S.C.S. SYMBOL	SOIL DESCRIPTION
							SWL measured at 19.59 feet below ground surface on November 17, 1999.
355	#3 sand from 342.6 to 370'						- silt increasing
360							
365							- slightly calcareous - water decreasing
370							

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PLATE 2h