Watkins-Johnson Environmental, Inc.
LITHOLOGY LOG

Sheet 1 of 1

Site ID: 937GW42

Project Name: PSF-IRA	Project No.: 0330.230	Coordinates:	
Drilling Company: Exploration	Driller: Wilbur Neufeld	Ground Elevation:	Total Drilled Depth: 31.7'
Drilling Equipment: 950 Failing	Drilling Method: Direct Rotary	Boring Diameter: 10.5"	Date/Time Drilling Started: 4/13/94 0815
Date/Time Total Depth Reached: 4/13/94 1005			
Type of Sampling Device: NA		Water Level (BGS): First	Final 6.43
Sample Hammer: Type NA	Driving Wt.	Drop	Hydrogeologist: MAB/ESK
Checked by/Date: RG 4/27/94 #4176			
Location Description (include sketch in field logbook): Approx 8 ft NNW of well 937GW06			

Depth (ft)	Interval	Recovery	Blow Counts	Description (include lithology, grain size, sorting, angularity, Munsell color name & notation, mineralogy, bedding, plasticity, density, consistency, etc. as applicable)	USCS Symbol	Lithology	Water Content	Estimate % of Gr	Sa	Fi	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
				See lithology log for well 937GW32							

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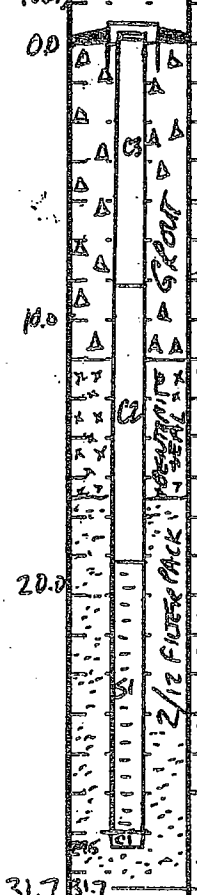
Watkins-Johnson Environmental, Inc.
WELL CONSTRUCTION SUMMARY

Well No.	937GW42
Combo/Key #	KEY # 0464
Project Name	PRESIDIO - I.R.A.
Project No.	0330.230
Coordinates	
Drilling Company	EXPLORATION DRILLING
Driller	WILBUR NEUFELD
Elevation: Ground Level / Top of Casing	
Drilling Equipment	FAILING 950
Drilling Method	DIRECT ROTARY
Total Drilled Depth	31.7'
Borehole Diameter	10.75"
Drilling Fluid	BENTONITE
Drill Bit(s)	10.75" TRI-CONE ROLLER BIT
Hydrogeologist	MAB/ESK
Checked by/Date	4/27/94

Location Description (include sketch in field logbook): NW OF BLDG 937 - 6.8 ft SE OF WELL 937GW06



ANNULAR CONSTRUCTION

Description	Type	Interval From (ft BGS)	Interval To (ft BGS)	Quantity
Filter Pack	#2/12 LONESTAR-CLEAN GRADED	31.7	17.0	800 lbs
Filter Pack Blotter (if applicable)	N.A.	N.A.	N.A.	N.A.
Seal	ENVIROPLUG BENTONITE PELLETS 3/8" DIA	17.0	12.0	150 lbs
Grout	LONESTAR PORTLAND TYPE I-II - 5% BENTONITE	12.0	0.0	420 lbs

CONSTRUCTION TIME LOG

Activity	Start Date	Start Time	Finish Date	Finish Time
Drilling	4-13-94	0915	4-13-94	1025
Reaming	NA			
Geophysical Logging	NA			
Casing/Screen Placement	4-13-94	1020	4-13-94	1030
Filter Pack	4-13-94	1040	4-13-94	1120
Seal	4-13-94	1125	4-13-94	1120
Grout	4-13-94	1235	4-13-94	1240
Preliminary Surge/Development				
Other:				

WELL STRING DESIGN

Surface Casing [length, diameter (OD), thickness]: MORRISON BROS., 8" x 12" FLUSH MOUNT

Casing [type, diameter (ID), thread type]: SCHD 40 PVC, 4" I.D. ASTM THREAD

Screen [type, slot-size, diameter (ID), thread type]: SCHD 40 PVC, 0.010 SLOTSIZE, 4" ID, ASTM THREAD

Casing/Screen Sequence & Interval (starting at bottom):

	BLANK CASING From (ft BGS)	BLANK CASING To (ft BGS)		SCREEN From (ft BGS)	SCREEN To (ft BGS)
C1	29.5	29.0	S1	29.0	19.0
C2	19.0	9.0	S2		
C3	9.0	0.5*	S3		
C4			S4		
C5			S5		
C6					
C7					
C8					
C9					
C10					
C11					

WATER ADDED DURING DRILLING/CONSTRUCTION

Total Amount (gals): 75 gal

COMMENTS:

* 0.5 ft BELOW SEAL ON FLUSH MOUNT SURFACE CASING
- GROUTED TO SURFACE, GROUT SETTLED AFTER 24 HOURS, INSTALLED SAND DRAIN, GROUTED REMAINING ANNULUS WHEN SURFACE CASING WAS INSTALLED

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