

RECEIVED

DIVISION OF WATER RIGHTS
REQUEST FOR PROVISIONAL/MONITOR WELL CONSTRUCTION
(for wells deeper than 30 feet)

OCT 10 1996
RECEIVED
WATER RIGHTS
SALT LAKE
OCT 7 1996

Well Type (check one): Provisional () Monitor (X)

Applicants Name: Bob Prescott Summit USA

Mailing Address: 155 S. MADISON ST. SUITE 230

WATER RIGHTS
PRICE

DENVER CO. 80209-3013

Contact Person: PETE DAVENPORT / O ^{AGRIAN} ^{DESIGN} ^{CONSULTANTS} Phone: (303) 399-9630

Proposed Start Date: 8/30/96 Anticipated Completion Date: 9/27/96

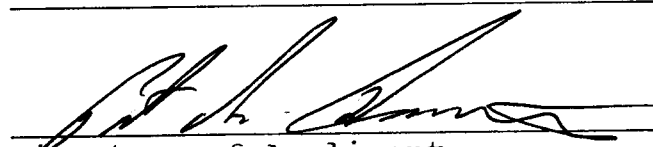
Well Drillers License No: 218 Proposed No. of Wells: 2 (w 1 Borehole)

PROPOSED LOCATION OF WELLS: County: SAN JUAN

NO./SO. DISTANCE (feet)	EAST/WEST DISTANCE (feet)	SECTION CORNER	SECTION	TOWNSHIP	RANGE	BASE	DIAMETER (inches)	DEPTH (feet)
N1000	W1300	W4	15	2S	1W	SL	2	100
N 1,350	W 2,050	W4	25	30S	25 E		4	1,000
"	"	"	"	"	"		2	410

Use back of form or additional paper if more room is needed

EXPLANATORY: DUAL COMPLETION OF 2 MONITORING WELLS IN SAME BOREHOLE: DEEP WELL IN ENTRADA/NAVAJO FORMATIONS, SHALLOW WELL IN BURRO CANYON FORMATION.


Signature of Applicant

10/3/96
Date

FOR OFFICE USE ONLY

Date of Request: Oct 7, 1996 Approval Date: 10-7-96

Approved by: AP Provisional/Monitor Well No. 96-05-D1M

Water Right Number (if available): NA



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER RIGHTS

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
Robert L. Morgan
State Engineer

Southeastern Area
453 South Carbon Avenue
P.O. Box 718
Price, Utah 84501-0718
801-637-1303

October 8, 1996

Summo USA
Attn: Bob Prescott
155 South Madison Street Suite 230
Denver, Colorado 80209-3013

Dear Mr. Prescott:

Re: Monitor Well 96-05-001-M

Reference is made to your request to drill 2 monitor wells. The anticipated completion depth is to exceed the minimum regulated and reporting monitor well depth of 30 feet.

The specifications outlined in your monitor request dated October 7, 1996, meet the State Engineer's requirements, and permission is hereby granted to complete the wells in accordance with those specifications and the following provisions:

- 1) Small diameter casing is to be used in the construction of the wells and no more water is to be diverted than is necessary to determine the quality of the ground water by obtaining representative samples as required by the project.
- 2) The wells must be drilled by a currently licensed Utah driller and must be drilled in a manner consistent with the recommended construction standards cited in the Utah State Administrative Rules for Well Drillers.
- 3) The enclosed Driller (Start) cards must be given to the licensed driller for his submittal prior to commencing well construction. The second portion of the card is the Applicant Card. It is YOUR RESPONSIBILITY to sign and return upon final well completion.
- 4) If complete information is not available in the initial application, it is the APPLICANT'S RESPONSIBILITY to provide, upon completion, descriptive locations of the wells referenced by course and distance from established section corners, i.e. North 565 feet and West 1096 feet from the SE Corner of Section 35, T2S, R5W, SLB&M.
- 5) At such time as the wells are no longer utilized to monitor ground water, and the intent of the project is terminated, the wells must be temporarily or permanently abandoned in a manner consistent with the Administrative Rules.

This is your authorization to have a licensed Utah driller proceed with your monitoring well project. Note that the expiration date for the provisions is April 8, 1997.

Sincerely,

Mark P. Page
Regional Engineer

Enclosures
MPP/mjk



1 One well will be drilled and completed with dual piezometers, one set
2 at approximately 410 feet, and the other set at approximately 1000
3 feet in depth.
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WELL DRILLER'S REPORT

State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

RECEIVED

Well Identification **MONITOR WELL: 96-05-001-M-01**

NOV 12 1996

Owner *Note any changes*
Summo USA
155 South Madison Street Suite 230
Denver, CO 80209-3013

**WATER RIGHTS
SALT LAKE**

Contact Person/Engineer:

Well Location *Note any changes*
NORTH 1350 feet WEST 2050 feet from the W $\frac{1}{2}$ Corner of
SECTION 30, TOWNSHIP 30S, RANGE 25E, SLB&M.

Location Description: (address, proximity to buildings, landmarks, ground elevation, local well #)

Drillers Activity Start Date: Aug 30, 1996 Completion Date: Sept 20, 1996

Check all that apply:
 New Repair Deepen Abandon Replace Public Nature of Use: Monitor well

DEPTH (feet) FROM TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID
0 440	2"	Rotary	air

Well Log	W A T E R	P E R M E A B L E	UNCONSOLIDATED							CONSOLIDATED		ROCK TYPE	COLOR	DESCRIPTIONS AND REMARKS (include comments on water quality if known.)
			C L A Y	S I L T	S A N D	G R A V E L	C O B B L E S	B O U L D E R	O T H E R	PERM	CON			
DEPTH (feet) FROM TO	high	low												
1 20										X	alluvium			
20 169										X	bedrock			
169 420										X	sandstone			
420 440										X	durio conglomerate formation			

Static Water Level

Date _____ Water Level _____ feet Flowing? Yes No

Method of Water Level Measurement _____ If Flowing, Capped Pressure _____ PSI

Point to Which Water Level Measurement was Referenced _____

Height of Water Level reference point above ground surface _____ feet Temperature _____ °C °F

Construction Information

DEPTH (feet)		CASING		DEPTH (feet)		PERFORATIONS	
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN TYPE OR NUMBER PER (per round/interval)
0	1-8	Steel casing 1/2" schedule 40	10"	10"			
0	305	PVC pipe	9"				
305	405	10' steel casing					

Well Head Configuration: Yes No
 Access Port Provided? Yes No
 Casing Joint Type: _____
 Perforator Used: _____

DEPTH (feet)	FROM	TO	ANNULAR MATERIAL, ABANDONMENT MATERIAL and/or PACKER DESCRIPTION	Quantity of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)
			Filter pack topped by 10' Bentonite pill bit followed by 3 1/2' of cement grout		
			49' Portland cement, 110 ft cement grout		
			2' Bentonite pill bit, approximately 2 1/2' of cement grout		
			10' Bentonite pill bit		
			Vertical slotted in hole between top of Bentonite pill bit		

Well Development / Pump or Bail Tests

Date	Method	Yield	Units Check One GPM CFS	DRAWDOWN (ft)	TIME PUMPED (hrs & min)

Pump Description: _____
 Horsepower: _____
 Pump Intake Depth: _____ feet
 Approximate maximum pumping rate: _____
 Well disinfected upon completion? Yes No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary circumstances, abandonment / procedures. Use additional well data form for more space.

Well Driller Statement

This well was drilled or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name: H. E. Brennan
 (Person, Firm, or Corporation - Print or Type)
 Signature: H. E. Brennan
 (Licensed Well Driller)

License No. 918

Date Nov 4, 1996

WELL DRILLER'S REPORT

State of Utah
Division of Water Rights

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NOV 12 1996

For additional space, use "Additional Well Data Form" and attach

Well Identification MONITOR WELL: 96-05-001-M-02

WATER RIGHTS
SALT LAKE

Owner *Note any changes*
Summo USA
155 South Madison Street Suite 230
Denver, CO 80209-3013

Contact Person/Engineer: _____

Well Location *Note any changes*
SOUTH 1351 feet WEST 2050 feet from the W $\frac{1}{4}$ Corner of
SECTION 25, TOWNSHIP 30S, RANGE 25E, SLB&M.

Location Description: (address, proximity to buildings, landmarks, ground elevation, local well #) _____

Drillers Activity Start Date: Aug 30, 1996 Completion Date: Sept 30, 1996
Check all that apply:
 New Repair Deepen Abandon Replace Public Nature of Use: monitor well

DEPTH (feet) FROM TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID
440 1195	4	Ratapog	air

Well Log	W A T E R	P E R M E A B L E	UNCONSOLIDATED							CONSOLIDATED		ROCK TYPE	COLOR	DESCRIPTIONS AND REMARKS (include comments on water quality if known.)
			C L A Y	S I L T	S A N D	G R A V E L	C O B B L E S	B L O C K S	O T H E R	ROCK TYPE	COLOR			
DEPTH (feet) FROM TO	PERMEABLE high low													
440 810									X	marl		marl formation		
810 985									X	shale		shale		
985 1195									X	sandstone		sandstone		

Static Water Level

Date _____ Water Level _____ feet Flowing? Yes No

Method of Water Level Measurement _____ If Flowing, Capped Pressure _____ PSI

Point to Which Water Level Measurement was Referenced _____

Height of Water Level reference point above ground surface _____ feet Temperature _____ °C °F

Well Log

Construction Information

DEPTH (feet)	FROM TO		CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM (in)	DEPTH (feet)		SCREEN <input type="checkbox"/> PERFORATIONS <input type="checkbox"/>
	FROM	TO				FROM	TO	
0	959	959	Module 50	4				
	959	999	P.V.C. Plastic	4				
	959	999	Standard Steel	4				
			Wire (round) Screen					

Well Head Configuration: Yes No

Casing Joint Type: Yes No

Perforator Used: _____

DEPTH (feet)	FROM TO		ANNULAR MATERIAL, ABANDONMENT MATERIAL and/or PACKER DESCRIPTION	Quantity of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)
	FROM	TO			
			0.5 H Bentonite plug was installed below filter sand to seal of well pipe		
			A mixture of 8-12 and 30-10 silica sand		
			used to seal around screen to 1 ft above the screen		

Well Development / Pump or Bail Tests

Date	Method	Yield	Units		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			Check One	Check Two		
Sept 20-96 Pump Test			GPM	CFS	7	complete 1 hr.

Pump (Permanent)

Pump Description: _____ Horsepower: _____ Pump Intake Depth: _____ feet

Approximate maximum pumping rate: _____ Well disinfected upon completion? Yes No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary circumstances, abandonment / procedures. Use additional well data form for more space.

Both 9" well and 4" well cemented from the inside.

Well Driller Statement

This well was drilled or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name: H. E. Deerman License No. 218

(Person, Firm, or Corporation - Print or Type)

Signature: H. E. Deerman (Licensed Well Driller)

Date: _____

