## SUBMISSION OF WATER DEVELOPMENT PROJECTS

	Throu	ab the development of acceptific studies defining the equifer w	ithis the Coder Basis it has been decumented that additional	FOR AGENCY USE ONLY						
		gh the development of scientific studies defining the aquifer w resources will be necessary to sustain the growth and further	development of the area. Without water the future economic	Application Number						
		opment will be impacted by the availability and cost of existing		Date Filed						
			water budget. This form is being circulated to document additional water supply sources that could be utilized the water deficit in the aquifer, as well as provide water for the future residents of the valley. This form will be							
		ated for completeness of content. Please ensure that the prop	•							
	the cla	aim is submitted for a complete evaluation.								
	Nam	e and address of applicant (include zip code)	Name, title, and address of authorized agent if	Telephone (area code)						
		F. Player	different from item 1 (include zip code)							
		W 546 S	H. Roice Nelson, Jr.	Applicant						
		r City, Utah 84720 yer@kennylakeventures.us	2155 W 700 S #31 Cedar City, Utah 84720	· + F · · · · · · ·						
	gipia	ver when the vertical colored	rnelson@walden3d.com	Authorized Agent						
_	Α.	Provide names, addresses, phone numbers and emai	l addresses of those who filled out this form		This					
		Gary F. Player	H. Roice Nelson, Jr.		with					
		1671 W 546 S	2155 W 700 S, No. 31		reso					
		Cedar City, Utah 84720	Cedar City, Utah 84720		The					
		gfplayer@kennylakeventures.us	rnelson@walden3d.com		from					
-		Project Description (Details are Vital)			conr					
	В.	roject Description (Details are vital)			woul					
	1.	Scope of Work and Project Description			wou					
	2. 3.	Type of System or Facility Quantity of Water Anticipated			<b>T</b> 1 .					
	4.	Scientific Analysis of Water Resource			The					
	5.	Uses (irrigation, culinary, industrial etc.)			is no					
	6. 7.	Years Resource is Available Constructability			Bria					
	8.	Additional information to describe resource and avail	ilability (utilize additional sheets as necessary)		belo					
		Onetana and Mall #1 at Changeborders Oakin Daad			canr					
		Cretaceous Well #1 at Sheepherders Cabin Road								
					wou					
			water from porous bedrock aquifers within the eastern		wou wate					
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STANDARD FORM 2015-1 (REV 6/2015) PAGE 1 free

B.7. This well could be drilled by local drilling contractors. Power lines are in place near the Sheepherders Cabin Road for easy access to the drill site. Produced water could be piped to a Crow Creek tributary within an economical and short (less than 500 feet) PVC pipeline.

B.8. Summaries of bedrock aquifer studies completed in 2010 are attached to the cover letter referenced above. More detailed reports can be provided when requested.

- C. Attach a map covering the area of development and location of proposed project.
- 1. Identify Property Ownership
- 2. Identify Potential Conflicts
- 3. Provide Details of the Area and Necessary Changes to the Area

A map showing the proposed location for the first well at Sheepherders Cabin road is attached. Also attached is a well log from a well drilled by Brian Head City into rocks overlying the Cretaceous Rocks.

C.1. The first test well would be drilled on lands owned by Southern Utah University.

C.2. Rapid agreement with surface owners at SUU is likely. Power lines and water lines will cross an SUU right of way, requiring negotiated access.

C.3. The proposed test well location is on private, developed lands. A well at Sheepherders Cabin Road would require a power line to be constructed across an SUU road. Produced water could be directed to Crow Creek through a tributary channel, less than 500 feet away from the proposed drill site.

- D. Identify any Federal, State or Local Government Issues
- 1. Federal
  - a. Army Corp of Engineers
  - b. Bureau of Land Management
  - c. Fish and Wildlife
  - d. Forest Service
  - e. Other

Federal issues, such as wetlands, are minimal on private property. Crow Creek and Coal Creek are both certified as having no fishery. The entire proposed area is outside of designated Sage Grouse Habitat.

### 2. State

- a. Department of Environmental Quality
- b. Division of Water Rights
- c. Other

There are no known State issues. Proposed stream flow maintenance could be done at rates that do not exceed 35 cubic feet per second, rates routinely exceeded naturally during spring run off. Cedar Basin water rights will be transferred by the Utah Division of Water Rights into each well prior to beginning full scale production. The sources of those water rights would be farmers, ranchers, Cedar City Municipal Water Utility, and Southern Utah University. It is at least possible that the wells would discover "new water" that could be appropriated to the District.

- Local
  - a. County
  - b. Municipal
  - c. Other

Approvals were already obtained 1 mile away at Woods Ranch, and so no local issues are anticipated.

E. Provide cost estimates of project

An exploratory well will cost on the order of \$200,000 to complete and equip with pumps and short pipelines to streams. A full scale development of 15 wells would cost approximately \$3,000,000 to produce 12,000 acre-feet per year. The CAPEX for full development of the aquifer would be on the order of \$250 per acre-foot.

## F. Describe additional evaluated alternatives, if any

Separate Submissions of Water Development Projects from Player and Nelson include the following: (1) Deepening of the Cedar City Quichapa Creek Number 1 well into the fractured quartz monzonite aquifer; and (3) A re-entry of the ARCo Three Peaks well to test the fractured quartz monzonite aquifer at Iron Springs.

G. Describe any environmental effects the proposed project would have on wildlife and/or plant species

Continuous summertime flow of Coal Creek could possibly allow the establishment of a trout fishery. Eventual construction of off-stream storage at Rock Creek would allow development of both trout and bass fisheries.

H. Provide cultural resource evaluations of proposed area

No cultural or archeological resources are present at the site. For your information, Player served as an environmental inspector during construction of the Kern River Pipeline, and supervised SUU archeologist Barbara Frank as she prepared clearances across a 100-mile segment of the line from Milford to eastern Nevada.

 Provide any additional information deemed necessary in the evaluation of this project to provide future sustainable water resources to the Cedar Basin

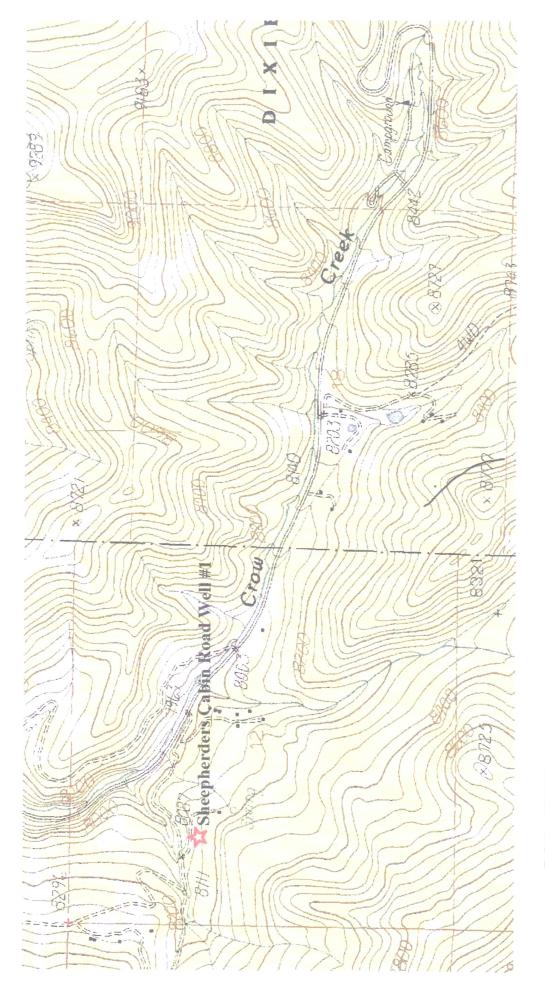
Player reviewed the Markagunt Plateau bedrock aquifer system for Cedar City in 2010. All of his work will be available for review with the permission of the City Engineer's office. For example, additional data includes meteorological studies, summaries of geology, water analyses, aquifer rock properties (matrix porosity and fracture systems), old well records, etc. Summaries of the aquifer study are attached to the cover letter accompanying this Submission.

Respectfully Submitted

Gary Farnsworth Player Utah Professional Geologist No. 5280804-2250 Idaho Professional Geologist No. 1050 Certified Petroleum Geologist No. 3097

H Koree Nelm

H. Roice Nelson, Jr. Texas Professional Geoscientist No. 5120 Louisiana Professional Geoscientist No. 879



PROPOSED SHEEPHERDERS CABIN ROAD EXPLORATORY WELL #1 LOCATION MAP:

Basemap is Webster's Flat Topographic Map

Submitted by G.F. Player and H. Roice Nelson, Jr.

# WELL DRILLER'S REPORT State of Utah Division of Water Rights or additional space, use "Additional Well Data Form" and attac

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		A T E	p.urx∑w∕∞⊥r	AI	LND	AV	B	BOTHE	ROCK TYPE	COLOR	grain com	position density, plas	sticity, shape, cementation, or, fracturing, minerology,
DEPTH		R	Ĕ			I.E.	ES	DR	ROCKTITE	COLOR	texture,de	gree of weathering, h	hardness, water quality, etc.)
FROM	TO	Hig	h Low		+	-	3			BLACK			
0	5			+		-			LAUS ROCK	BLACE	V	ONS SAND	
5	15	*	*		×	-	X		LOUS Ene	eran	Hell		
15	30	*	×			-	¥	X					
30	65	4	*	-		×	×	×					
65	65 93 × × × LAVA							×	LAVA		VARY	HORD FRAC	Jueso
93	96	×	×			×	×			BLDCKE	WHITE	ê	
96	112	×	×					×	LOUD	BLACK	HDRO	)	
112	129	×	×					X	LAUDE	RED BRON	NO VI	bey Hoed	13m
129	135			X				x"		11	LLAY	15 TAU ORDI	nee
135	146			×		1	-	×		1	11	ÖRAUGE	NOV 71 20
Static W		21											Ale in all
	1-28		)				11/	ater	Level 137	feet Flo	wing?	(es 🛛 No	Phone 12
Method	of Water	Lev	el M	easi	uren	nen	t	C	NHERD	If Flowi	ng, Capped	Pressure	PSI
Doint to	Which V	Vater	Lev	el N	Apas	SUTE	me	nt u	as Referenced 7	OP OF LD	SING Tempera	Elevation -	ees C RF
Height	of Water	Leve	l refe	eren	ice p	poir	nt a	DOVE	e ground surface	itel	rempera	ture <u>41</u> degre	

Well Log

DEDTIT	(fast)			CASIN	G		DEPTH	(feet)	SCREEN T	PERFORATIONS	OPEN BOTTOM
DEPTH	TO		CASING TYPE AND		WALL THICK	NOMINAL DIAM.	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)		SCREEN TYPE OR NUMBER PERF (per round/interval)
0	<u>ان</u>	A 53	MATERIAL/GRA		(in) .375	(in) 30	520	600	, 050	16	STAILULESS STEE
0	115		68000	8	.312	24 "	705	745	.050	16"	304 STANIE
+2	520	153	6240E	в	.312	16 11	735	745	BUDUK .030	85/4 85/8 4	304 STAWLEY
٥٥.	205	ASI	George	в	.312	16 11	805	1200	3LANK .050	8519" 849"	304 STOLILLERS
00	175		62000	8 B B B B B B B B B B B B B B B B B B B	· 2.50 · 2.50	442"	1470 62005	1480	BLOUK ACCESS T	BES	
(e)) Head	Configura	Ç	TEEL	PLOT	Ē				Access	Port Provided? 🕱 Ye	es 🗌 No
	0		wite				Perforator	Used:	STAILLE	SJ STEEL	304
			(Yes □No		Depth of S	urface Seal:	115	feet	Drive Sł	ioe? 🗆 Yes 🔍 No	
urface Sea	al Material	Placement	Method:	-	o 50/	SO D	BOTTON	r Bo	uk To S		DC DC
			used? 🙀 Yes	□No If	yes, depth of c	asing:(			iameter: <u>30</u>		
DEPTH	I (feet)						VAL SEA	1		ACKER INFORM	
FROM	то		and PAC	KER TYP	AL, FILTER PA	IPTION		(	y of Material Use	(lbs./gal., # bag	DENSITY mix, gal/sack etc.)
0	6	Cen	ALTER Y		-		ielo		(uBIC FE		
0	115	50		-	(Entrist				CURIC YOR		65
560	750	-3/8	Round		GRAUF			45	CUBIC Y		
	1476	17	~ 0		0			1 11	( Z. C. V.		
140		12	- 20 Si	uce <	gaag		•••••	16	CUBIC YA	203	
940	113	-+	BENTON			LLLO			CUBIC For		
95	113	3/8	BENTON	SITE	HOLE P		120 - OL	13	CUBIC For	et	
95 PLAC	113 50 10	3/8	BENTON Hosovy Br	ULTE ENTONC	Hole P Té Deni		110 - OL	13	CUBIC For		
95 PLAC	113 50 10	3/8	BENTON	ULTE ENTONC	Hole P Té Deni		110 - OL	13	CUBIC For	57 24 (651,200	TIME
وع Pرمد Well De	113 50 10	3/8	BENTON Hosebuy Be Vell Yield Te	ULTE ENTONC	Hole P TE Denie mation		I	13	CUBIC For	et	TIME PUMPED (hrs & min)
وج       PLDC       Well Dev       DA	velopme	3/8 4800 ( nt and W	BENTON Hosebuy Be Vell Yield Te	ع رتور در مرور st Infor METHO	Hole P TE Denie mation			13 LT Side	Cusic For s up 1000 : Units Check One	DRAWDOWN	PUMPED
QS PLDC Well Dev DA	velopme	3/8 Ween Int and W	BENTON Horsey Br Vell Yield Te	ع رتور در مرور st Infor METHO	Hole P TE Denie mation		(مو	13 T Side YIELD	Units Check One GPM CFS	DRAWDOWN (ft)	PUMPED (hrs & min)
<b>GS</b> Рсос Well Dev DA рт. Ост. 4= 10-2	LI 3 velopme TE 11 2-11	3/8 New It and W Auz	BENTON Hosovy Br Vell Yield Te	SUTE SUTOUC St Infor METHO	Hous P To Deric mation D		(e	IZ T Side YIELD	Units Check One GPM CFS	DRAWDOWN (ft) 380	PUMPED (hrs & min)
95 PLDC Well Dev DA pt. Oct. 97. Oct. 93 20 -	LI 3 So IU velopme II 2-// -	3/8 Hoor IEST	BENTON Herouy Bo Vell Yield Te DEUELOG PULLOD	SUTE SUTOUC St Infor METHO	Hous P To Deric mation D		(e	IZ T Side YIELD	Cusic For sup wro : Check One GPM CFS	DRAWDOWN (ft) 3260 326	PUMPED (hrs & min) 46 WC 184 WS
GS PLDC Well Dev DA pr. Qc7. 4= 10-2 8 = 20 -	L 1 3 velopme TE 11 - 12 Permane	3/8 Hora IEST WELL	BENTON HEBUY BO Vell Yield Te DEUELOJ DEUEL DEUEL	SUTE SUTOUC St Infor METHO	Hole P TE Decie mation D or-	into Fue	رمو ۱۱ ٤	IZ T Side YIELD 63 325	Cusic Fee s up wto : Check One GPM CFS X X X	DRAWDOWN (ft) 380 326 304.40	PUMPED (hrs & min) 46 Wrs 184 Wrs 45.25
95 PLDC DA DA pT. OCT. 97 97 92 92 92 92 92 92 92 92 92 92 92 92 92	velopme TE 11 - 12 Permane escription	3/8 New Contract of the second Auge TEST (WELL (N) (N)	BENTON Horovy Br Vell Yield Te DEUELOG PURD DEUEL	METHO	Hole P TE Denie mation D 27-	into Fue	ريو ۱ \ ٤ Horse	13 T Side YIELD 63 32-5	Cusic Face Units Check One GPM CFS X X X F	DRAWDOWN (ft) 3260 326	PUMPED         (hrs & min)         46 Wrs         184 Wrs         45.25         184 feet
GS P∟⊳∠ DA pT. Oct. gT. Oct. gT. Oct. G ⇒ 20 - Pump De Approxi	velopme TE 11 - 12 Permane escription mate Ma	3/8 Hora IEST (JEST (JEST (JEST (JEST (JEST)	BENTON How by Br Vell Yield Te DEUELOG DEUELO DEUEL UEUEL	SUTE SUTOUC SET INFOR METHO OPLES	Hole P TE Denie mation D 27	iito Fu	L \ E Horse Well	13 T Side YIELD 63 325 Disinfed	Cusic Fee supurto : Check One GPM CFS X X X F cted upon Com	DRAWDOWN (ft) 380 32.6 304.40 Pump Intake Depth pletion? □Yes [	PUMPED         (hrs & min)         46 Wrs         184 Wrs         45.25         184 feet
GS P∟⊳∠ DA DA pT. QT. 4= 10-2 8 = 20 - Pump (F Pump Do Approxi Comme	velopme TE 11 - 12 Permane escription mate Ma	3/8 Next Next Next Next Next Next Next Next	BENTON HENDY BE Vell Yield Te DEOFIOG PLAND DEOEL umping Rate	SUTE SUTO SET INFOR METHO D) ~ Ex OP - ~ Ex	Hole P TE Denie mation D ST ST	nal materials un	L \ E Horse Well sed. problem well data for	13 T Side YIELD 63 325 Disinfect us encounter m for mor	Cusic Fee s up unto : Check One GPM CFS X X X F eted upon Com ered, extraordinar e space.	DRAWDOWN (ft) 380 32.6 304.40 Pump Intake Depth pletion? □Yes [	PUMPED (hrs & min) 46 W€ 184 WS 45.25
GS $P \downarrow P \downarrow P$ DA $pT \cdot Q = T$ Q = 10 - Z Q = 20 - 2 Q =	velopme TE 11 -12 Permane escription mate Ma nts	3/8 Wood It and W Auz IEST WENC IEST WENC IEST WENC IEST WENC IEST	BENTON Hereby Be Vell Yield Te DEUELOG DEUELO DEUEL umping Rate ription of const umstances, abai	METHO	Hole P TE Denie mation D T ED T ED E E T E E T E E E E E E E E	nal materials un se additional	Horse Well sed. problem well data for To 54	13 T Side YIELD 63 325 Disinfectors as encounter of Fige	Cusic Fee Units Check One GPM CFS X X X Y Feed upon Come ered, extraordinar e space.	DRAWDOWN (ft) 380 32.6 304.40 Pump Intake Depth pletion? □Yes [	PUMPED         (hrs & min)         Чь ше         18Ч ше         45.25         18Ч.         18Ч.         45.25         18         18         18         45.25         18         18         45.25         18         19         18         18         18         95.25         18         19         10         10         10         10         10         10         110         110         110         110         110         110         110         120         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110
$Q_{S}$ $P_{L} = Q_{S}$ $P_{L} = Q_{S}$ $P_{L} = Q_{S}$ DA A DP DDA A P DDDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DDA A P DA A P DA A P DA A P DA A P DA A P DA A P DA A P A A A A A A A A	velopme TE 11 2-11 Permane escription mate Ma nts	3/8 1000 100 100 100 100 100 100 100 100 10	BENTON Herovy Br Vell Yield Te DEOFOG DEOFOG DEOFOG DEOFU UEOFU umping Rate ription of const umstances, abar	SUTE SUTO SET INFOR METHO SOPLES COPLES SUTE D	Hole P TE Denie mation D 27- 20- 27- 20- 20- 20- 20- 20- 20- 20- 20- 20- 20	nal materials un lise additional	Horsep Well Well sed. problem well data for To 5 G	13 T Side YIELD 63 32-5 Disinfect m for mor	Cusic Fee Units Check One GPM CFS K X X X F eted upon Com ered, extraordinar e space. T THE	DRAWDOWN (ft) 380 32.6	PUMPED         (hrs & min)         46 Wr         184 Wrs         45.25         184 Wrs         45.25         184 Wrs         5000000000000000000000000000000000000
$\begin{array}{c} \mathbf{GS} \\ \mathbf{P}_{\mathbf{C}\mathbf{D}\mathbf{C}} \\ \mathbf{P}_{\mathbf{C}\mathbf{D}\mathbf{C}} \\ \mathbf{DA} \\ D$	velopme TE 11 2-11 - 12 eermane escription mate Ma nts 52 52	3/8 1000 Aue TEST WELL nt) n: ximum P Desc Circu yell WELL Aue Source S	BENTON HENDY BE Vell Yield Te DEVEROS PARE DEVEROS DEVEL Umping Rate umping Rate stor Sc Stor Sc Stor Sc	METHO COPLEG Truction ac truction ac CTED COPLEG	Hole P TE Denie mation D D D D D D D D D D D D D D D D D D D	nal materials un se additional	Horse Well sed. problem well data for To 54	13 T Side YIELD 63 325 Disinfect is encounter for more 0 File PLACE	Cusic Fee Units Check One GPM CFS K X X F Check One GPM CFS K Check One GPM CFS K Check One GPM CFS K Check One GPM CFS K S Check One GPM CFS K S S S S S S S S S S S S S	DRAWDOWN (ft) 380 32.6 32.6 32.6 304.40 Pump Intake Depth pletion? $\Box$ Yes [ y $SC E \leq \leq 1.60$ $\leq 40.70$ $\leq 40.70$ $\leq 40.70$ $\leq 52.7.5$	PUMPED         (hrs & min)         46 Wrs         184 Wrs         45.25
95         PLDC         DA         DA         pt. Oct.         pt. Oct.         8 = 20 -         8 = 20 -         Pump (F         Pump De         Approxi         Comme         P=D         Swbw	velopme TE 11 2-11 - 12 eermane escription mate Ma nts 52 52	3/8 1000 Aue TEST WELL nt) n: ximum P Desc Circu yell WELL Aue Source S	BENTON HENDY BE Vell Yield Te DEVEROS PARE DEVEROS DEVEL Umping Rate umping Rate stor Sc Stor Sc Stor Sc	METHO COPLEG Truction ac truction ac CTED COPLEG	Hole P TE Denie mation D D D D D D D D D D D D D D D D D D D	nal materials un se additional	Horse Well sed. problem well data for To 54	13 T Side YIELD 63 325 Disinfect is encounter for more 0 File PLACE	Cusic Fee Units Check One GPM CFS K X X F Check One GPM CFS K Check One GPM CFS K Check One GPM CFS K Check One GPM CFS K S Check One GPM CFS K S S S S S S S S S S S S S	DRAWDOWN (ft) 380 32.6 34.6 34.6 34.6 34.6 34.6 34.7 35.7 32.7.5 49.5 7EST Res	PUMPED         (hrs & min)         46 Wrs         184 Wrs         45.25         184 Wrs         45.25         184 Wrs         5000000000000000000000000000000000000
PLDC Well Dev DA $p_T \cdot Och$ . 14 = 10 - 2 18 = 20 Pump (F Pump Do Approxi Comme PED FED SUDE	velopme TE 11 2-11 - 12 eermane escription mate Ma nts 52 52	3/8 1000 1 1000 1 1	BENTON HEDVY BE Vell Yield Te DEVELOG DEVELOG DEVELOG DEVELOG DEVELOG DEVELOG SE SE SE SE SE SE SE SE SE SE SE SE SE	SUTE SUTE SUTE SUTE SUTE METHO D) Ex- OP Ex- OP C	Hole P TE Denie mation D D D D D D D D D D D D D D D D D D D	hal materials un hal materials un like additional stortso ricetteo ricetteo ricetteohar and the suphar additionalfor the	Horse Horse Well sed. problem well data for To 54 de 111 H To 14 IN To 14 bervision, act	13 T Side YIELD 63 325 Disinfect is encounter m for more 0 File 0 File 0 File 0 File 0 Ties cording to	Cusic Fee Units Check One GPM CFS X X X X F Check One GPM CFS X X F Check One GPM CFS X X F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS T T Check One GPM CFS T T Check One GPM CFS T Check One GPM CHECK T Check One GPM CHECK Check One Check	DRAWDOWN (ft) 380 32.6 34.6 34.6 34.6 34.6 34.6 34.6 34.6 34.6 34.6 34.7 35.7 35.7 35.7 32.7 35.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.6 32.5	PUMPED         (hrs & min)         46 Wr         184 Wrs         45.25
$\begin{array}{c} \mathbf{GS} \\ \mathbf{P}_{\mathbf{L}\mathbf{DC}} \\ \mathbf{P}_{\mathbf{L}\mathbf{DC}} \\ \mathbf{DA} \\ \mathbf$	velopme TE 11 2-11 - 12 Permane escription mate Ma nts - 52 	3/8 1000 1 1000 1 1	BENTON HENDY BE Vell Yield Te DEVEROG PULAD DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG DEVEROG	SUTE SUTE SUTE SUTE SUTE METHO D) Ex- OP Ex- OP C	Hole P To Denie mation D D D D D D D D D D D D D D D D D D D	hal materials un hal materials un like additional stortso ricetteo ricetteo ricetteohar and the suphar additionalfor the	Horse Horse Well sed. problem well data for To 54 de 111 H To 14 IN To 14 bervision, act	13 T Side YIELD 63 32-5 Disinfect is encounter for more o Field PLACE PLACE Cording to cording to	Cusic Fee Units Check One GPM CFS X X X X F Check One GPM CFS X X F Check One GPM CFS X X F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS X T F Check One GPM CFS T T Check One GPM CFS T T Check One GPM CFS T Check One GPM CHECK T Check One GPM CHECK Check One Check	DRAWDOWN (ft) 380 32.6 34.775 52.7.5 49.577.825 72.57 32.75 32.6 32.6 32.75 32.7	PUMPED         (hrs & min)         46 Wr         184 Wrs         45.25

DEPTH	(fart)									
	(leet)		CASIN			DEPTH	(feet)			OPEN BOTTOM
FROM	то	CASING TYP AND MATERIAL/GR	ADF.	WALL THICK (m)	NOMINAL DIAM. (in)	FROM	то	SCREEN SLOT SIZE OR PERF SIZE (III)	(in)	SCREEN TYPE OR NUMBER PERF (per round/interval)
0	6	A 53 60000	B	.375	30	520	600	, 050	16"	STANUES STEE
0	115	AS3 GRADE	8	.312	24 "	705	745	.050	16"	304 STANK
+2	520	153 6000E	в	.312	16	735	805	BLADK .030	85/24 85/84	304 STAWLES
600	705	ASI GEDORE	в	.312	16	805	1470	3LANK .050	85/81 85/8	304 STAILLER
00	175	ASS GRODE	BB	· 2.50 · 2.50	4/2"	14.70 62005	1480	BLANK ACCESS T	BES	
	Configurat	0	PLOTA	4				Access	Port Provided? 🕱Ye	s 🗆 No
	t Type:					Perforator	Used:	STANDLES		
		stalled? Ves 🗆 No		Depth of S	urface Seal:		fcet	Drive Sh	oe? 🗆 Yes 🖾 No	
		Placement Method:	under 1 Ke				a Bo	LL TO SI		
		ce casing used? A Yes		6		p" fe	eet d	iameter: <u>30</u>	THIS CASING	2012
DEPTH							L / FILT	ER PACK / PA	ACKER INFORM	ATION
FROM	то			L, FILTER PA			(i	y of Material Used f applicabi	(lbs./gal., # bag	DENSITY mix, gal./sack etc.)
Ô	6	CEMENT à	BENTON	othe H	our PL	uelo	36	( UBIC FEE	7	
0	115	50/50 St	200 (	-En Ex	T		11	cueic YAR	05 18.40 1	bs
560	750	3/8 Round	PED	ORAUE			45	CUBL YO	ras	
740	1476	12-20 Si	uca S	Qu4			16	Cubic You	25	
95	113	3/2 BENTON	SLTE	HOLE PI	_ub		13	CUBIC FEE	π	
PLDC	50 10	Near Hosoury B			the second se	io - 01	T SIDE	up into 2	4" LASIND	
Well Dev	elopmen	t and Well Yield Te	st Inform	nation						
			(TTUO)			1	TELD	Units Check One	DRAWDOWN	TIME PUMPED
DA	TE		METHOD	)			ILLD	GPM CFS	(ft)	(hrs & min)
рт. Ост.	11 L	NZ DEUELOJ	THER	2		60	O	×	380	46 lure
4= 10-22		EST RUND				١١	63	×	326	184 Ws
8 = 20 -	12 0	VELL DEVEL	opues	T		8	25	×	304.40	45.25
Dump (P	ermanen	t)			a allama anna a' fhirir Raadhina					
						Horsep	ower:	Pu	mp Intake Depth:	feet
<b>*</b>	scription:	imum Pumping Rate							letion? 🗆 Yes 🗆	
	and the second second	Description of const	and the second	The Color of the Color of the Color of the	al materials us					
Commen		Circumstances, abar	donment pi	ocedures. Us	ie addiiional w	ell data form	n for more	space.		. (
PEA	GRAU	HAS EXTEN	CTED	FOOLL SU	NEFOLE	TO 56	O FEE	r. 14E	SCREEN WA	H COLLAPSE
From	524	1 TO 540' SCI	2254 5	SIZE DIS	FUETED C	e un	525124	ED FROM	2010 320	THE SUDGEN
TOOL 4	ups u	WABLE TO GO	BELO	w 541	6\$/4 . 1	NSTALLER	) IEST	Merep To 6	195 /EST KESU TEST	NUTS WERE SALL
Well Dri	ller State	ment This well wa	drilled and	l constructed i	under my supe to the best of	rvision, acco my knowled	ording to a ge and bel	pplicable rules and ief.	d regulations.	
WCH DI		and and repo				-				
	RIMSHA	W DRILLING		1			Lic	ense No	240	
	RIMSHA	W DRILLING	Firm. or Corporation -	i'nai or Type					240 14 - 2012	2

# WELL DRILLER'S REPORT ADDTIONAL DATA FORM State of Utah Division of Water Rights

Page Z of 3

Well Identification

Change Application: a37313 (75-661)

Owner Note any changes Town of Brian Head P.O. Box 65 Brian Head UT 84719

Contact Person/Engineer: \_

Well Location Note any changes

S 568 E 2182 from the W4 corner of section 02, Township 36S, Range 9W, SL B&M

UNCONSOLIDATED CONSOLIDATED DESCRIPTION AND REMARKS Well Log LURNWARLE (e.g., relative %, grain size, sorting, angularity, bedding, W A T grain composition density, plasticity, shape, cementation. consistancy, water bearing, odor, fracturing, minerology. Ē ROCK TYPE COLOR texture, degree of weathering, hardness, water quality, etc.) DEPTH (feet) FROM TO High Low OZANGE × 146 148 LAUA REO BROWH FORMATION Ison CLAY ORANGE 174 X X 148 RED BROWN & BLAC X LOND 179 × s. 174 HARD User BLACK RED BROWH LOUD 193 y. ¥ 179 2 ۰.( ч ٤ [ LAUD & QUARTZ 4 ٨ 193 J. 227 ч ч 11 LOUD × × 393 ¥ 227 HARD MED BLACK X LOUR 489 × X 393 HARD VAR RED BLACK × LOUD × \* 509 489 41 11 LOUD BLACK 4 £ 547 s. 509 HARD FEDERURSO BLACK 4 LAUD 551 4 × 1 547 FRAJURE) HORD VARY BLACK LDUD X XX 551 582 HDRO RED BROWH X LAUD X ×. 596 582 RED LOUD × × Ľ 609 596 RED, BROWN & BLACK HARD × LOUD 1 699 4 609 BRITHE Haen 1.54 5 X LAUA × 699 788 × RED, BROWTO & BLACK SOME WHITE Bib FEDRINGE LAUA XX 790 X 788 (LARON FURLATION WHITE, TON MUDSTONE X 790 857 HAROGR WHITE MUDSTONE X 879 857 RED MUDSTONE X 866 879 WHITE MUDSTONE X 886 927 FEACTURED HARDER MUDSTOUR WHUTE × 931 927

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

Well Log

# WELL DRILLER'S REPORT ADDTIONAL DATA FORM State of Utah Division of Water Rights

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S 568 E 2182 from the W4 corner of section 02, Township 36S, Range 9W, SL B&M

UNCONSOLIDATED CONSOLIDATED CSSSGUDT LLIARABUDH ALLNABLE YTDVBLE SR Well Log DESCRIPTION AND REMARKS W LRMEABLE (e.g., relative %, grain size, sorting, angularity, bedding, ATER grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology. ROCK TYPE COLOR texture, degree of weathering, hardness, water quality, etc.) DEPTH (feet) FROM TO High Low FURLATION LARON MUDSTONE WHITE K 931 1206 BROKEN HORO FRATURED NUDSTONE URDN6F. X 1210 Ł 4 1206 WHITE & GRAY FIZALTURED NALLOSTONE VELLOW X × 1210 1246 × FRACTURED HARD LALLOSTONE GRANGE X 1 1263 × 1246 FEDULLED VARY HARD ORDUGE LLUOSTULE 1263 1294 1 × × HORD ORDNGE LLUOSTONE × 1294 1362 X HAVED FRACTURED BIG FLUID LOSE ORANGE LUDSTONE X 1308 XX 1302 URANGE LLUDSTOLE × X X 1314 1398 BIG FLUD LOSE OPANGE FEDGIUZED X LLUDSTONE 1322 × × 1314 GRADD LASTLE FEDETURAD TAN (ONGLOUSZOTE WHITE X x 1330 × 1322 FURLATION 11 u CONGLOWGEDTE X 1333 1330 L FRACTURED CONGLOWERDIE 5 × × + 1333 1338 11 5 (ONGLOMERATE 1354 1338 LONGLOUGODOFE FZACTURED 11 4 L 1440 × 1354 X CONGLOMERATE 11 15 1440 1480 (LARON FORMATION) ORANGE RED X NUDSTONE 1480 1502

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

Well Log

Page 3 of 3