

Hydro Logic, Inc.

1002 W. Franklin Street, Boise, ID 83702 (208) 342-8369, Fax (208) 342-3100, hli@hydrologicinc.net

RECEIVED

September 11, 2013

SEP 16 2013

Shelley Keen, Manager
Water Rights Section
Idaho Department of Water Resources
322 East Front Street
Boise, Idaho 83720-0098

DEPARTMENT OF
WATER RESOURCES

Subject: Spring Valley Ground Water Monitoring Data Submittal for the First Half of 2013

Dear Shelley:

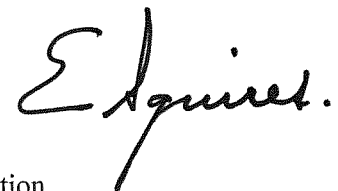
I am in receipt of your letter dated July 25, 2013 relative to the Spring Valley development (formerly M3 Eagle) ground water level monitoring data submittals. You are correct that we called out 12-hour monitoring intervals in the M3 Eagle Monitoring Plan for the very reason you cite (footnote 4 on Page 3 of the Monitoring Plan). We will continue to record hourly measurements because that technique allows us to do more in-depth hydrogeologic analysis and especially helps in matching the monthly hand-measurements to the digital data to catch instrument drifts more quickly. I simply neglected to run the macro reducing the data set to the 12-hour readings you referred to in your letter. This is an easy and quick data manipulation in Excel that I will make certain we do on all future submittals to the Department.

On a related matter, our preliminary analysis of the Spring Valley monitoring data for 2013 shows consistent responses from all the monitoring sites. This indicates an areally extensive and hydraulically interconnected aquifer from the valley floor and across the full extent of the Pierce Gulch Sand Aquifer under the proposed Spring Valley development. The lack of ground water development over the last several years, coupled with this year's extreme dry conditions, has caused a relatively small but noticeable drawdown affect which we believe is from increased ground water pumping in 2013. This increase in ground water pumping is apparent in monitored wells from the valley floor to the top of the regional aquifer (PGSA) on the Spring Valley development and beyond toward the Payette Valley. These most recent data provide positive news because they confirm the hydraulic interconnection between the strongly recharged municipal wells within the City of Eagle and those within the lower Eagle foothills and beyond—again, an extensive aquifer system that gains recharge from valley sources.

The attached preliminary hydrographs show the regional effects. I would expect this hydraulic event also to show up in the Department's North Ada County ground water level monitoring network as well and the attached hydrographs from the Department's web site do appear to show that. HLI will fully report on our interpretations of the water level data after the first Spring Valley wells are constructed and brought on line as required by M3's Monitoring Plan.

Respectfully,
Ed Squires, President
Hydro Logic, Inc.

c: Bill Brownlee, M3 Eagle, LLC
Jeffrey C. Fereday, Givens-Pursley LLP
Bruce Smith, Moore, Smith, Buxton, & Turke, Chtd.
Brent Arte, City of Eagle
John Thornton, North Ada County Groundwater Users Association
David Head, North Ada County Foothills Association
Norman L. Edwards





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

GARY SPACKMAN
Director

C.L. "BUTCH" OTTER
Governor

July 25, 2013

ED SQUIRES
HYDRO LOGIC INC
1002 W FRANKLIN ST
BOISE ID 83702

RE: Spring Valley Ground Water Monitoring Data Submittal for the First Half of 2013

Dear Ed:

The Department has reviewed the water level data you submitted via CD on behalf of the City of Eagle in connection with Permit No. 63-32573. The data and reporting method appear to comply with the requirements of the monitoring plan incorporated into the permit as Attachment B. The data has been integrated into the Department's Hydro.Online application for accessing ground water level data, and the CD is stored with the water right file.

The data that you submitted is for water levels taken hourly. The monitoring plan calls for water levels to be measured and recorded at 12-hour intervals (see page 3). To maintain a manageable data set, the Department recommends limiting future data collection and reporting to the 12-hour cycle called for in the plan.

If you have any questions, please call me at 208-287-4947, or email me at shelley.keen@idwr.idaho.gov.

Sincerely,

A handwritten signature in black ink that reads "Shelley Keen".

Shelley W. Keen, Manager
Water Rights Section

cc: Bruce Smith
City of Eagle
Jeffrey C. Fereday
M3 Eagle LLC
Alan Smith
John Thornton
North Ada County Foothills Assn.
Norman L. Edwards

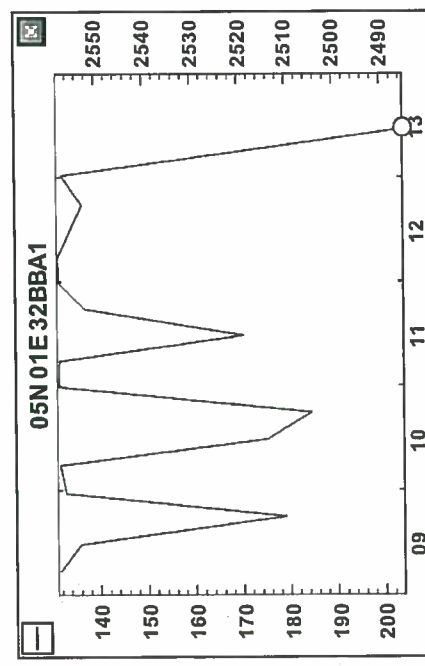
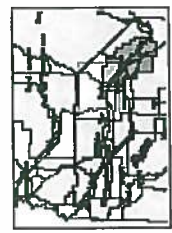
hydro.online - for Ground Water Level Data

Idaho Department of Water Resources

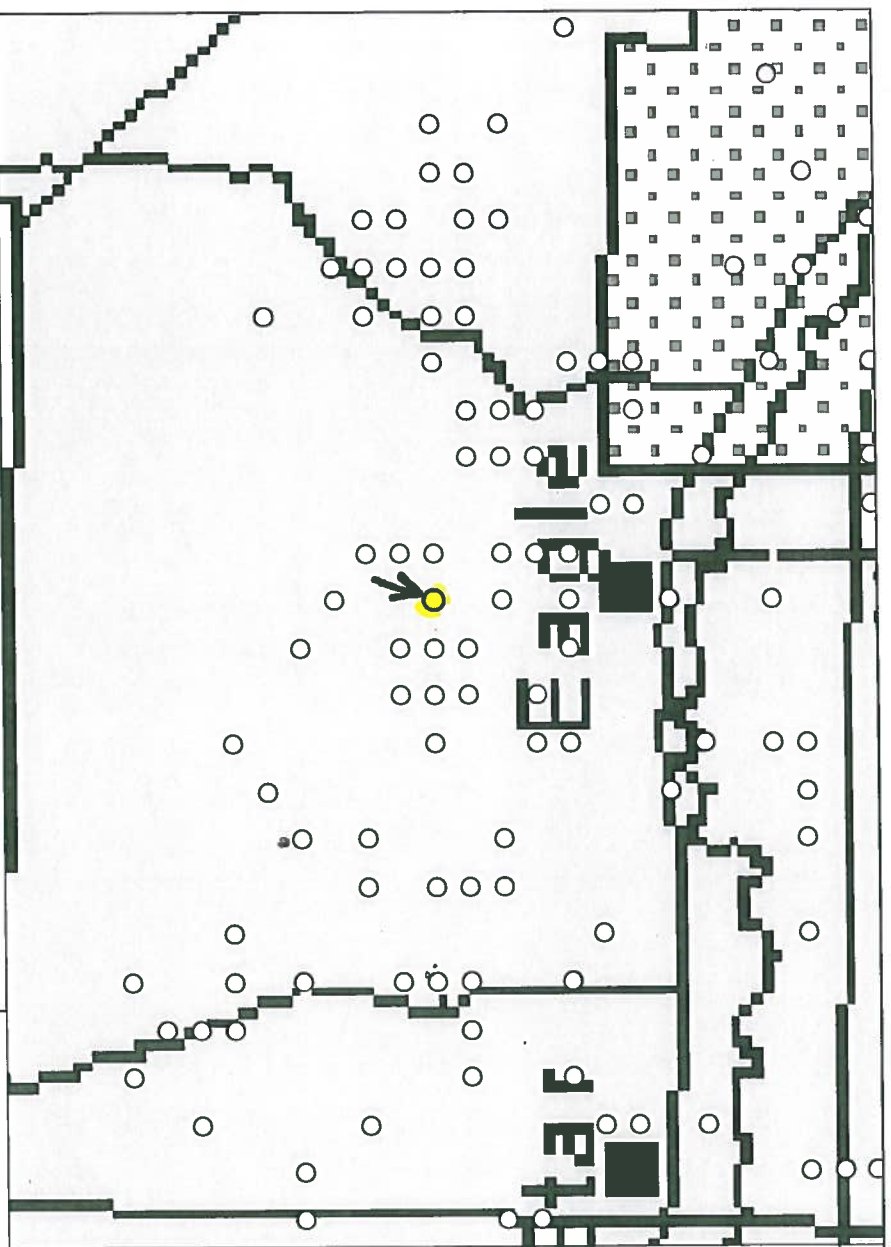
Boise 100k Quad

Index Wells Graph Help

Well Number	Water Use	Year Drilled	Min WO	Max WO	Total Depth	LSD Elev	# of WLS	WL Start	WL End
05N 01E 32BBA1	Domestic	1994	232	237	239	2689	16	2009	2013
05N 01E 32CCA1	Domestic		144	150	150	2645	20	2008	2013
05N 01E 32CCD1	Domestic	1972	130	136	145	2634	19	2008	2013
05N 01E 32DBD1	Domestic	1992	120	125	128	2660	16	1992	2010
05N 01E 33CCCD1	Domestic	1991	168	190	190	2632	8	1991	2001
05N 01E 33CCDC1	Domestic	1991	149	154	154	2637	3361	1991	2013
05N 01E 33DDDD2	Domestic	1996			240	2644	20	2008	2013
05N 01E 34ACC1	Domestic	2008	90	170	170	2714	20	2008	2013

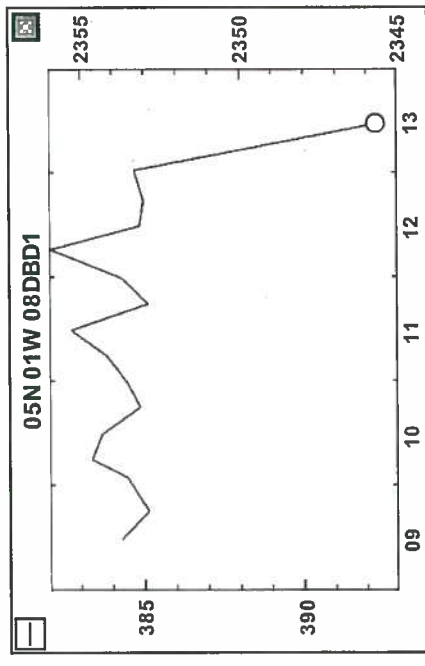


Recording Date	Depth To Water (feet)	Site Status	Recording Agency
12/21/2009	132.85		IDWR
03/29/2010	131.66		IDWR
06/28/2010	175.05	Pumping	IDWR
09/30/2010	184.45	Pumping	IDWR
12/29/2010	131.46		IDWR
03/29/2011	131.58		IDWR
06/27/2011	170.23	Pumping	IDWR
09/27/2011	136.92		IDWR
12/27/2011	131.54		IDWR
03/26/2012	131.28		IDWR
09/25/2012	136.43		IDWR
01/07/2013	132.18	Recent Pumped	IDWR
06/17/2013	203.65	Pumping	IDWR



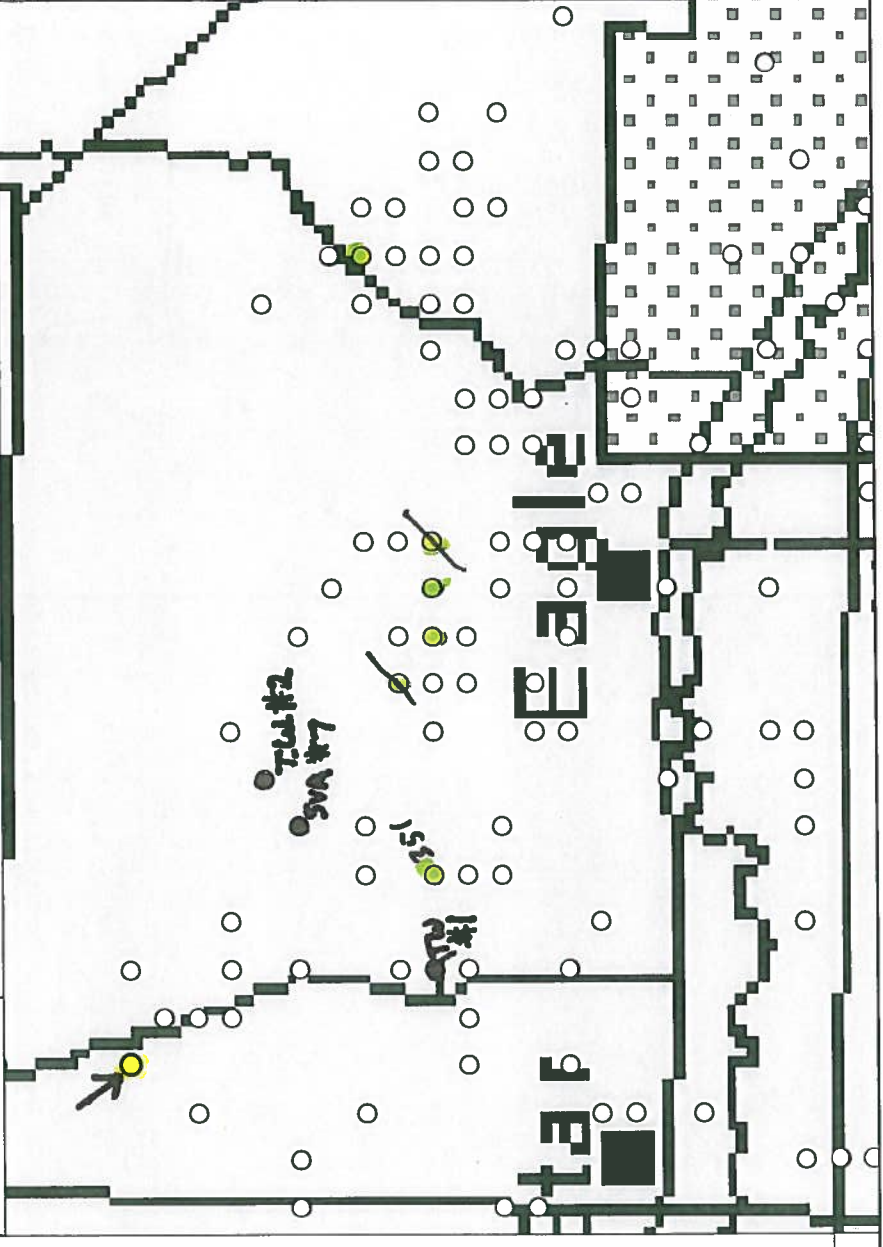
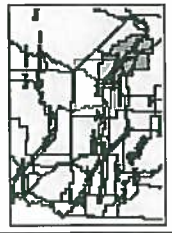
Boise 100k Quad

Index Wells Graph Help



Recording Date	Depth To Water (feet)	Site Status	Recording Agency
03/31/2010	383.34		IDWR
06/28/2010	383.66		IDWR
10/01/2010	384.87		IDWR
12/27/2010	384.45	Pumping	IDWR
03/30/2011	383.81		IDWR
06/28/2011	382.69		IDWR
09/28/2011	385.12		IDWR
12/27/2011	384.3		IDWR
04/06/2012	382.04		IDWR
06/27/2012	384.87	Pumping	IDWR
09/25/2012	384.99		IDWR
01/08/2013	384.7		IDWR
06/18/2013	392.25	Recent Pumped	IDWR

Well Number	Water Use	Year Drilled	Min WO	Max WO	Total Depth	LSD Elev	# of WLS	WL Start	WL End
05N 01W 08DBD1	Domestic	1966	390	450	450	2738	16	2009	2013
05N 01W 09CAD1	Domestic	1991	285	415	425	2680	845	1991	2012
05N 01W 09CCD2	Irrigation	2004	560	740	740	2816	2460	2004	2010
05N 01W 13BDD1	Unused	2006	432	442	446	2783	2630	2007	2010
05N 01W 15CCC1	Unused	2006	399	419	446	2783	1830	2007	2010
05N 01W 15CCC2	Unused	2006	369	379	446	2783	1834	2007	2010
05N 01W 15CCC3	Unused	2006	334	354	446	2783	4576	2007	2013
05N 01W 15CCC4	Unused	2006	334	354	446	2783	4576	2007	2013



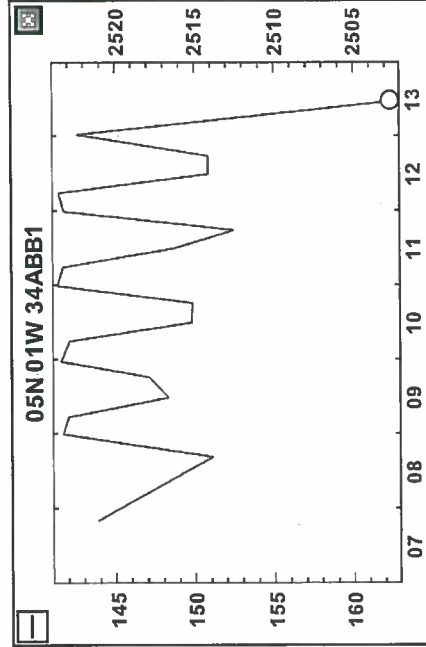
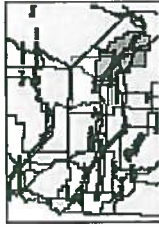
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Water Resources

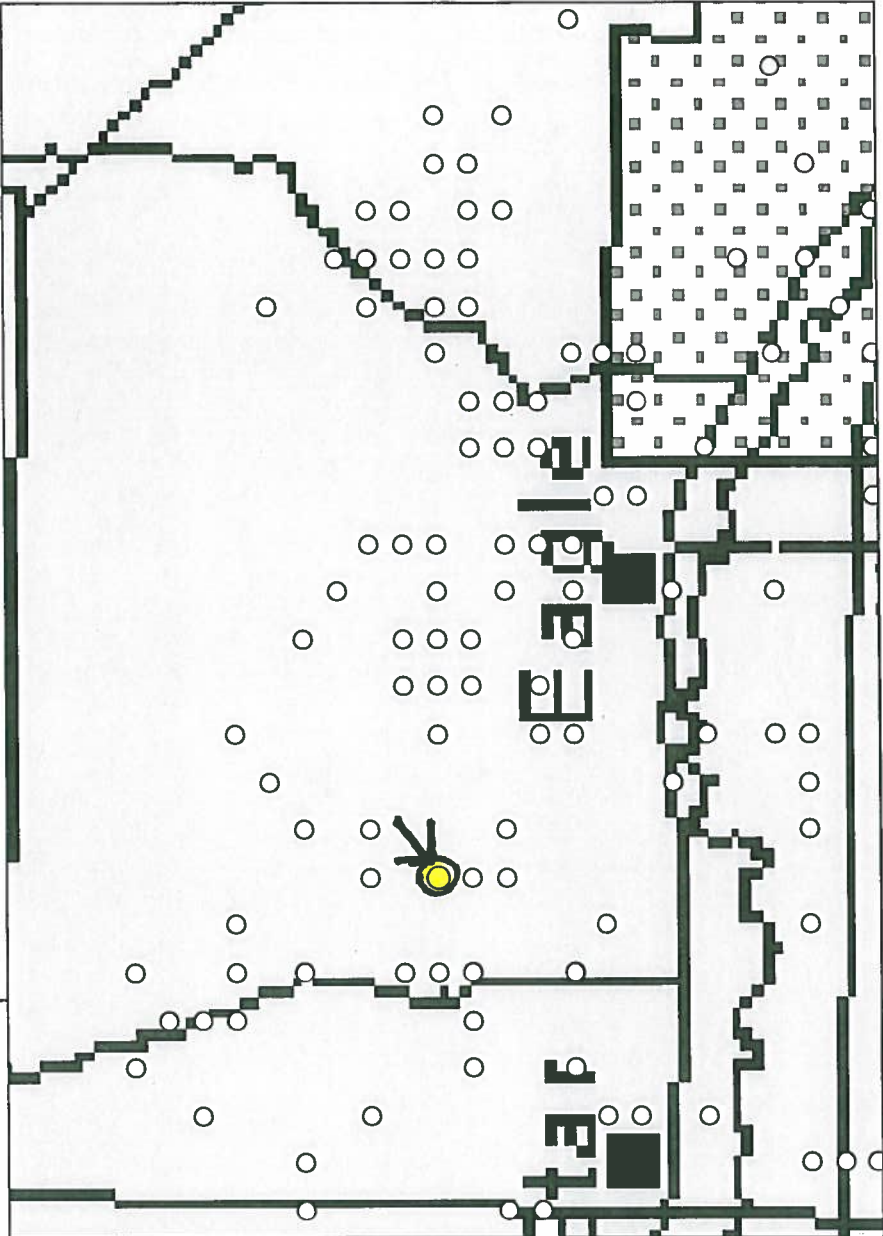
Index Wells Graph Help

Boise 100k Quad

Well Number	Water Use	Year Drilled	Min WO	Max WO	Total Depth	LSD Elev	# of WLS	WL Start	WL End
05N 01W 34ABB1	Domestic	1996	341	351	351	2665	20	2007	2013
03N 03E 33DAA1	Domestic	1968	120	127	127	2862	97	1980	2013
05N 01W 34DDC2	Irrigation					2572	14	2009	2013
03N 03E 32BBA1	Unused	1975	232	260	280	2823	123	1996	2013
05N 01W 36AAD1	Domestic	1996	118	123	123	2615	17	2009	2013
05N 01W 36ABB1	Domestic	1968		105	105	2618	199	1980	2013
05N 01W 36ADA1	Domestic					2614	17	2009	2013
05N 02E 30CBB1	Domestic	2000	337	355	355	3015	20	2008	2013



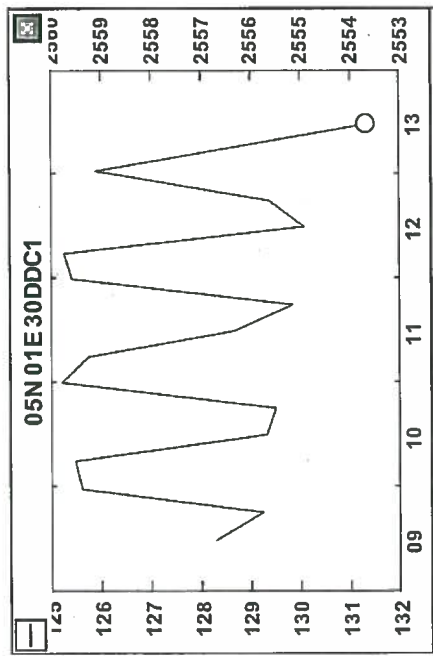
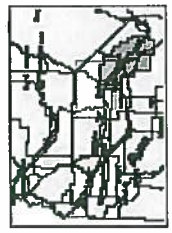
Recording Date	Depth To Water (feet)	Site Status	Recording Agency
03/31/2010	142.09		IDWK
06/29/2010	149.8	Recent Pumped	IDWR
10/04/2010	149.85	Recent Pumped	IDWR
12/27/2010	141.32		IDWR
03/29/2011	141.68		IDWR
06/28/2011	148.64		IDWR
09/27/2011	152.5		IDWR
12/27/2011	141.74		IDWR
03/28/2012	141.41		IDWR
06/27/2012	150.85		IDWR
09/25/2012	150.84		IDWR
01/07/2013	142.59		IDWR
06/17/2013	162.27		IDWR



Move hydrograph by pressing mouse, drag, and release

Index Wells Graph Help

Well Number	Water Use	Year Drilled	Min WO	Max WO	Total Depth	LSD Elev	# of WLS	WL Start	WL End
05N 01E 30DDC1	Domestic	2008	274	284	284	2685	16	2009	2013
05N 01E 31ACA1	Domestic	1964	90	99	99	2655	7	1993	2000
05N 01E 31BAC1	Domestic					2652	18	2008	2013
05N 01E 31CBA1	Domestic	1998	99	123	123	2828	3356	2008	2013
05N 01E 32BBA1	Domestic	1994	232	237	239	2689	16	2009	2013
05N 01E 32CCA1	Domestic		144	150	150	2645	20	2008	2013
05N 01E 32CCD1	Domestic	1972	130	136	145	2634	19	2008	2013
05N 01E 32DBD1	Domestic	1992	120	125	128	2660	16	1992	2010



Recording Date	Depth To Water (feet)	Site Status	Recording Agency
U3/29/2010	125.47	IDWR	IDWR
06/29/2010	129.32	IDWR	IDWR
09/30/2010	129.5	IDWR	IDWR
12/29/2010	125.21	IDWR	IDWR
03/29/2011	125.74	IDWR	IDWR
06/27/2011	128.66	IDWR	IDWR
09/27/2011	129.85	IDWR	IDWR
12/27/2011	125.41	IDWR	IDWR
03/26/2012	125.26	IDWR	IDWR
06/26/2012	130.08	IDWR	IDWR
09/25/2012	129.38	IDWR	IDWR
01/07/2013	125.9	IDWR	IDWR
06/17/2013	131.26	IDWR	IDWR

