Alice Jolene Owens

EL PASO COUNTY
WATER RESOURCES REPORT
For
Owens Subdivision
(Property Record Card 4100000428)

December 2019

Prepared By:

JDS-HYDRO
CONSULTANTS, INC.

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Executive Summary:
Water Resources Report—Jolene Owens Subdivision

A proposed development at a property owned by Alice Jolene Owens (Property Record Card 4100000428) consists of approximately 38.8 acres and is located at 17055 Red Barn Road in Peyton, CO 80831. The development is primarily located in Section 13, Township 11 South Range 64 west. The proposed development is planned to consist of 7 residential and properties which will be provided water services through individual residential wells drilled into the not-nontributary Dawson Aquifer and wastewater served through individual on-site wastewater treatment systems (OWTS).

It is expected that each rural residential home in the proposed subdivision will require an average of 0.48 annual acre-feet of water (which uses represent annual allocations for domestic use, irrigation, commercial, replacement, and stock water). This anticipated water demand is consistent with historic needs for nearby developments in the Black Forest area. Overall annual demand is anticipated to consist of an annual average of 3.36 AF/year between the 7 proposed lots.

The estimated annual depletion to the designated basins by the end of the 300-year period is modeled as 0.214 AF/year or 6.36% of overall annual pumping within the development at full buildout. Of the 0.267 AF/year estimate depletions at year 300, 0.208 AF/year is estimated to occur within the Kiowa-Bijou designated basin, 0.005 AF/year is estimated to occur within the Upper Big Sandy designated basin, and 0.001 AF/year within the Upper Black Squirrel designated basin. At full buildout, return flows from the septic fields are projected to return 1.575 AF/year between the 7 proposed lots at 90% of the domestic flows. This projected amount is more than enough to cover estimated depletions out of the designated basin alluvium by year 300 of pumping.

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SECTION 1 INTRODUCTION

The purpose of this study is to provide a preliminary outline of the water resources, wastewater needs, and replacement requirements that would be necessary to support residential uses within the proposed 7-lot development of the Alice Owens Subdivision.

1.1 New Development Description:

Development at the proposed Owens subdivision is estimated to consist of 38.8 acres subdivided into roughly (7) 5.0 acre lots. The proposed subdivision is to be located near the intersection of Ranch Hand Road and Red Barn Road near the address of 18430 Lost Ranger Road in Peyton, CO. The development is primarily located in Section 13, Township 11 South, Range 64 West. The proposed lots are to be provided water through on-site individual wells drilled into the Dawson Aquifer. Wastewater service is to be provided via on-site septic systems designed to be non-evaporative. **Appendix A** contains a preliminary layout for the proposed Owens Subdivision.

SECTION 2 PROJECTION OF WATER NEEDS

2.1 *Analysis of Water Demands:*

Expected water demands and return flows are calculated in **Appendix B.** Table 2-1 below estimates the projected water demands for development at the Owens Subdivision. Each well is proposed to divert 0.48 acre-feet of water annually for in house use in one single family residence (0.25 acre-foot per residence for domestic indoor use; remaining 0.35 acre-feet per residence would be dedicated to the remaining beneficial uses on the property such as irrigation and stock watering uses).

Table 2-1 -Projected Water Demands for Owens Subdivision

# of Units	*Land Use*	*Water Use Per Unit (AF/Unit)*	*Annual Demand (AF)*	*Average Daily Flow (ADF) (GPD)*	*Maximum Daily Flow (MDF) (@ 2.5 x ADF) (GPD)*	*Peak Hour Flow (@ 1.5 x MDF) (GPM)*
7	**Residential (Rural, Well, OWTS)**	**0.48**	**3.36**	**3,000**	**7,500**	**7**

SECTION 3 PROPOSED WATER RIGHTS AND SYSTEM FACILITIES

3.1 Water Rights:

Water rights adjudications have been decreed by the State of Colorado Ground Water Commission Findings in Water Right Nos.1585-BD, 1586-BD, 1587-BD, and 1588-BD and are summarized in **Appendix C**. Of note, approximately 35.7 acres of the original 74.5 acres was sold to Mirmohammad Adili and Madonna Lee Suarez in 2018 leaving approximately 38.8 acres with Ms. Owens. The available decreed Denver Basin water supply below the remaining property was reduced proportionally according to the amount of property sold. This reduction is summarized in the Special Warranty Deed concerning water rights contained in **Appendix C**. Following the sale of property, the remaining Denver Basin water supply is available for use at the Owens property as summarized in **Table 3-1**.

Table 3-1
Summary of Available Legal Water Supply
for Owens Property Subdivision

Water	Annual 100-year Supply (Acre-Feet)	Annual 300-year Supply (Acre-Feet)
Dawson (NNT)	10.1	3.37
Denver (NT)	19.8	6.60
Arapahoe (NT)	15.2	5.06
Laramie-Fox Hills (NT)	12.8	4.27

The intent of the developer is to use the remaining water in the Dawson not-non-tributary aquifer to supply all residential uses described in Section 2 above. The estimated 3.37 AF/year available for 300-year supply in the Dawson aquifer enough to serve the 3.36 AF/year estimated for the 7 proposed residential lots. Projected depletions to the alluvium from the proposed 300-year pumping period out of the Dawson Aquifer are presented in Section 5 of this report.

Proposed beneficial use of the water from the decrees includes domestic, irrigation, stock watering, commercial, and replacement purposes.

3.2 Source of Supply:

Domestic and commercial water demand will be met using individual wells drilled into the Dawson formation.

3.3 Water Quality and Treatment:

The water quality in the Dawson Aquifer in this area has typically been suitable for residential potable use. Water samples were obtained from an existing Dawson well located at 18750 Ranch Hand Rd. Water samples were obtained from the well on October 16, 2019 with water quality testing performed by Colorado Analytical

Laboratories per the El Paso County Land Development Code section 8.4.7(B). Final results from this water quality testing were received on November 6, 2019 and can be found in **Appendix E**.

There are two compounds that are near or above the MCL. Lead results reported were 0.013 mg/L with an MCL of 0.015 mg/L. Iron was reported at 1.293 mg/L which is above the Secondary MCL of 0.3 mg/L. High iron content in water is not hazardous to health but can lead to the staining of clothing and give water a disagreeable metallic taste. A whole house water filter for the removal of iron is recommended.

3.4 Water Storage:

Each single-family home should install its own individual pressure tank. The size and pressure of the tanks are to be determined by the property owner.

SECTION 4 WASTEWATER PRODUCTION

4.1 Wastewater Loads

Wastewater projections are based on similar residential and commercial historical use in the rural locations of the Pikes Peak region. There are 7 proposed residential units expected in the proposed development, all of which will all have on-site septic systems. The proposed source of replacement water will be from septic leaching field return flows released through the domestic use of Dawson ground water. Return flows from each lot will consist of an estimated 90% of the water used for in-house purposes. Therefore, assuming each residential lot uses a total annual amount for in-house use of 0.25 acre-feet, the return flow per lot would be .225 acre-feet annually (or 1.575 AF/year from all seven (7) proposed lots). Please see Table 4-1 below for a more detailed representation of the estimated annual return flows to the Kiowa Bijou, Upper Black Squirrel, and Upper Big Sandy Designated Basins. Of note, the proposed septic systems will be individually engineered according to specific individual soils evaluations obtained from each individual lot and be designed to promote non-evaporative conditions from the septic fields.

Table 4-1 - Projected Return Flows to the Upper Black Squirrel and Kiowa-Bijou Alluvial Aquifer

Wastewater Loads				
# of Units	***Type***	***Average Daily Flow (ADF) (GPD)***	***Maximum Daily Flow (GPD)***	***Return Flow (AF/Year)***
7	**Residential**	**3,375**	**8,436**	**1.575**

4.2 On-Site Wastewater Treatment Systems

Seven (7) single family homes will be served by individual on-site wastewater treatment systems. Soils information relevant to the design of the individual on-site wastewater treatment (septic systems) is included in **Appendix D**. As indicated in Page 8 of the report there are areas where Soil Type 4, sandy clay with blocky soil structure that will require to be designed by a Professional Engineer registered in the state of Colorado. However, regardless of the soils encountered at each OWTS each system will need to be sized and designed per the specific test pit evaluation, resulting LTAR's, and estimated wastewater effluent flow at each site per El Paso County Health Department Regulations.

SECTION 5 PROJECTED DEPLETIONS AND ASSOCIATED REPLACEMENT PLAN

5.1 Depletions vs. Replacement

The AUG3 program developed by the Colorado Department of Water Resources was utilized to estimate the annual depletion to the alluvial aquifer system of the Kiowa-Bijou, Upper Black Squirrel Creek, and Upper Big Sandy Designated Ground Water Basin over a 300-year period. Specifically, the DA02 model for the Upper Dawson aquifer was used to estimate the post-pumping depletion quantities for 7 wells located in Section 13, Township 11 South, Range 64 West. Annual pumping from the proposed development was assumed to be 3.36 AF/year over a 300-year pumping period as estimated in Table 2-1 above. The 2019 version of AUG_3s Designated Basin 5-year Timestep was utilized for this evaluation.

Based on the results from this model, the maximum designated basin depletion is 0.214 AF/Year (6.36% of annual pumping at full build-out) which would occur in year 300. The proposed replacement plan would utilize return flows from each on-site individual septic leach filed on the order of 0.225 AF/Year-SFE (residential) which is estimated to provide approximately 1.575 AF/year of return flows. Overall, these proposed return flows would be more than sufficient to augment the above estimated annual post-pumping depletions within the development. Replacement volumes generated from septic return flows Tables outlining the designated basin depletions and the overall 300-year stream depletion summaries can be found in **Appendix D.**

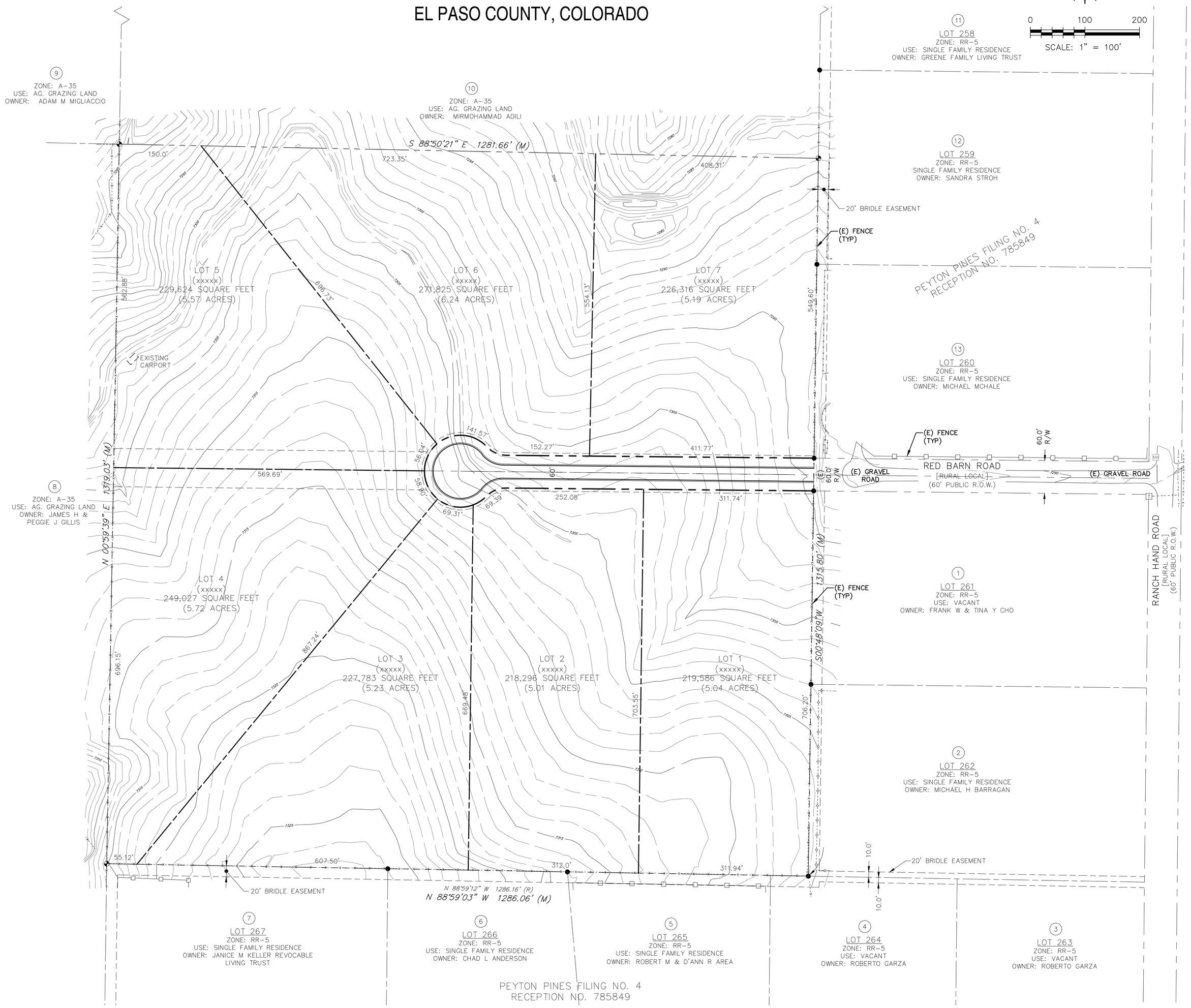
Appendix A

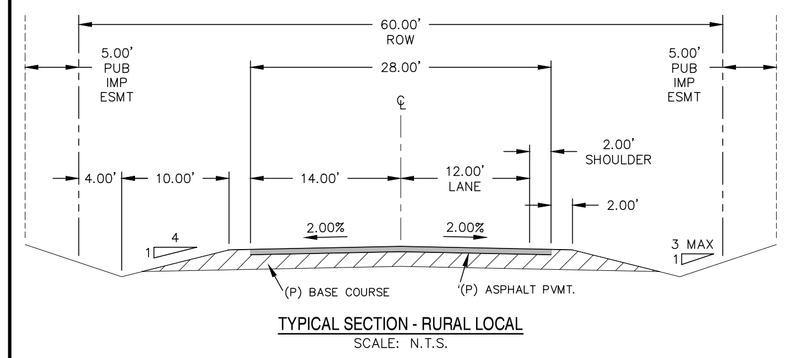
ALICE OWENS PROPERTY

PRELIMINARY PLAN

SECTION 13, TWP 11, RANGE 64 WEST OF 6TH PRINCIPLE MERIDIAN

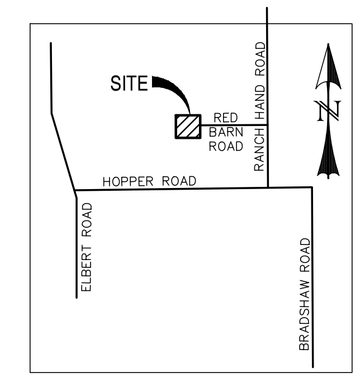
EL PASO COUNTY, COLORADO





TYPICAL SECTION - RURAL LOCAL
SCALE: N.T.S.

ADJACENT OWNERS LIST			
ID NO.	OWNER	POINT OF CONTACT	MAILING ADDRESS
1	FRANK W & TINA Y CHO	FRANK W & TINA Y CHO	400 MACKENA PLACE PLACENTIA, CA 92870-5158
2	BARRAGAN MICHAEL H	BARRAGAN MICHAEL H	18030 RANCH HAND ROAD PEYTON, CO 80831-7125
3	ROBERTO GARZA	ROBERTO GARZA	4134 FELLSLAND DRIVE COLORADO SPRINGS, CO 80922-4303
4	ROBERTO GARZA	ROBERTO GARZA	4134 FELLSLAND DRIVE COLORADO SPRINGS, CO 80922-4303
5	ROBERT M & D'ANN R AREA	ROBERT M & D'ANN R AREA	16605 OAK BRUSH LOOP PEYTON, CO 80831-7128
6	CHAD L ANDERSON	CHAD L ANDERSON	16715 OAK BRUSH LOOP PEYTON, CO 80831-7114
7	JANICE M KELLER REVOCABLE LIVING TRUST	JANICE M KELLER, CO-TRUSTEE JOHN R KELLER, CO-TRUSTEE	16755 OAK BRUSH LOOP PEYTON, CO 80831-7114
8	JAMES H & PEGGIE J GILLIS	JAMES H & PEGGIE J GILLIS	16746 HOPPER RD PEYTON, CO 80831-9407
9	ADAM M MIGLIACCIO	ADAM M MIGLIACCIO	16561 WILD HORSESHOE VW PEYTON, CO 80831-9548
10	MIRMOHAMMAD ADILI	MIRMOHAMMAD ADILI	17400 SW 48TH ST FORT LAUDERDALE, FL 33331-1106
11	GREENE FAMILY LIVING TRUST	GREENE FAMILY LIVING TRUST	18220 RANCH HAND ROAD PEYTON, CO 80831-7125
12	SANDRA STROH	SANDRA STROH	18175 SUNBURST DRIVE MONUMENT, CO 80132-8297
13	MICHEAL MCHALE	MICHEAL MCHALE	17170 RED BARN ROAD PEYTON, CO 80831-7124



VICINITY MAP
SCALE: N.T.S.

OWNER:

ALICE OWENS
18430 LOST RANGER ROAD
PEYTON, CO 80931-7650
(719) **XXX-XXXX**

CIVIL ENGINEER:

CATAMOUNT ENGINEERING
P.O. BOX 221
WOODLAND PARK, CO 80866
CONTACT: DAVID MIJARES, PE
(719) 426-2124

ELECTRIC:

MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC.
11140 EAST WOODMEN ROAD
FALCON, CO 80831
CONTACT: DAVID WALDNER, ENGINEERING MANAGER
(719) 494-2675

GAS:

BLACK HILLS ENERGY
18965 BASE CAMP ROAD A-7
MONUMENT, CO 80132
CONTACT: JASON MCKUNE, UTILITY CONSTRUCTION PLANNER
(303) 549-2271

LEGAL DESCRIPTION:

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 13, IN TOWNSHIP 11 SOUTH, RANGE 64 WEST OF THE 6TH PRICIPLE MERIDIAN IN EL PASO COUNTY, STATE OF COLORADO.

(PER SPECIAL WARRANTY DEED RECORDED UNDER **RECEPTION NO. XXXXXX**)

LEGEND

EXISTING	(E)
PROPOSED	(P)
ADJACENT OWNER TABLE ID NUMBER	(#)
BOUNDARY	
RIGHT-OF-WAY	
LOT LINE	
EASEMENT	
EASEMENT – "NO BUILD"	
(E) CONTOUR, INDEX	6820
(E) CONTOUR	
(P) CONTOUR, INDEX	6820
(P) CONTOUR	
(P) "NO BUILD" AREA	

NOTES:

1. **SERVICE FEES TO BE PAID AS FOLLOWS:**
   PARK $
   SCHOOL $
   DRAINAGE
   TRAFFIC

SEWAGE & WATER INFO:

SEWAGE DISPOSAL MEANS:

INDIVIDUAL SEWAGE DISPOSAL SYSTEMS

WATER SOURCE:

INDIVIDUAL WELLS

PCD FILE NO: XX-XX-XXX

REV.	DESCRIPTION	DATE

Know what's **below.** Call 72 hours before you dig.
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PREPARED FOR:
ALICE OWENS
18430 LOST RANGER ROAD
PEYTON, CO 80831-7650
PHONE

PREPARED BY: DAVID — ENGINEERING.

NOT FOR CONSTRUCTION

CATAMOUNT ENGINEERING
321 W. HENRIETTA AVE PO BOX 221 WOODLAND PARK, CO 80866 (719)426-2124

ALICE OWENS PROJECT		DESIGNED BY: DLM	DRAWN BY: DBM
		SCALE: 1"=100'	DATE: 08/27/19
PRELIMINARY PLAN		JOB NUMBER 18-158	SHEET 1 OF 1

M:\Catamount Projects\PROJECTS\18-158 Alice Owens\DWG_LAYS\18-158 Prelim Plan - Prelim Plan - Tuesday, August 27, 2019 4:47:14 PM - Denise

M:\Catamount Projects\PROJECTS\18-158 Alice Owens\DWG_LAYS\18-158 Prelim Plan - Prelim Plan - Tuesday, August 27, 2019 4:47:14 PM - Denise

Appendix B

Appendix B: Estimated Annual Water Use and Pumping Rates

Use	Constant	Increment
Domestic Indoor	0.250	AF/year
Irrigation Outdoor	0.150	AF/year
Stock[1]	0.080	AF/year
Total Well Demand	**0.480**	**AF/year/lot**

Note 1: Stock watering assumes (4) large domestic animals

Total Annual Usage 3.36 AF/year

Estimated Return Flows through Septic (domestic use only)

Percent of domestic Indoor	90.00%	
Volume return	1.575	AF/year

Appendix D: AUG-3 Denver Basin Depletion Model - Maximum Depletions

Using DesignatedBasins5-year_Timestep_2019 Model for wells inside of Desginated Basins - Kiowa-Bijou

Upper Dawson Aquifer - Not-Nontributary

Pumping Interval	Formation	Total Depl. (AF/yr)	Total Depl. (% of Pumping)	Kiowa (AF/yr)	Upper Big Sandy (AF/yr)	Upper Black Squirrel (AF/yr)
300-year pumping period						
Pumping Period	Upper Daw. (NNT)	0.214	6.36%	0.208	0.005	0.001

Summary Table 1

Applicant Name	Jolene Owens	
Receipt No.	1588-BD	
Number of Years of Pumping	300	
Pumping Rate (ac-ft/yr)	3.36	
Total Volume (ac-ft)	1008	
Legal for All Sections	Section 13, T 11 S, R 64 W	
Model	DA02	
Aquifer	Dawson	

100th Year Stream Depletion

Streams	100th Year Depletion (ac-ft/yr)	q/Q (%)
MONUMENT	0.000	0.007
EAST PLUM-W&E BRANCH	0.000	0.000
RUNNING CREEK	0.000	0.001
WEST CHERRY	0.001	0.024
EAST CHERRY	0.005	0.140
CHERRY	0.000	0.003
KIOWA	0.067	1.982
KETTLE	0.000	0.004
SAND-DIV2	0.000	0.004
BIG SANDY	0.000	0.007
BLACK SQUIRREL-UBSCDB	0.000	0.000
Total	**0.073**	**2.172**

South Platte(No Designated Basin Streams)	0.006	0.168
Arkansas(No Designated Basin Streams)	0.000	0.015
Designated Basin	0.067	1.989

Summary Table 2

Model Period (years)	300			
Applicant Name	Jolene Owens			
Receipt No.	1588-BD			
Number of Years of Pumping	300			
Pumping Rate (ac-ft/yr)	3.36			
Total Volume (ac-ft)	1008			
Legal for All Sections	Section 13, T 11 S, R 64 W			
Model	DA02			
Aquifer	Dawson			

Maximum Stream Depletion

Streams	Max.Depletion during model period (ac-ft/yr)	Year during model period	Max. Depletion during pumping period (ac-ft/yr)	Year during pumping period
MONUMENT	0.009	300	0.009	300
EAST PLUM-W&E BRANCH	0.001	300	0.001	300
RUNNING CREEK	0.002	300	0.002	300
WEST CHERRY	0.020	300	0.020	300
EAST CHERRY	0.045	300	0.045	300
CHERRY	0.007	300	0.007	300
KIOWA	0.208	300	0.208	300
KETTLE	0.004	300	0.004	300
SAND-DIV2	0.008	300	0.008	300
BIG SANDY	0.005	300	0.005	300
BLACK SQUIRREL-UBSCDB	0.001	300	0.001	300
Total	**0.311**	**300**	**0.311**	**300**

South Platte Basin(No Designated Basin Streams)	0.075	300	0.075	300
Arkansas Basin(No Designated Basin Streams)	0.022	300	0.022	300
Designated Basin	0.214	300	0.214	300

Created by JDS-Hydro Consultants, Inc. on November 12, 2019

Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

Exhibit A
Replacement Plan - Determination No.: 1588-BD-BD

Designated Basin Summary Table for Jolene Owens Pumping Rate of 3.36 acre-feet per year for 300 Years from the Dawson aquifer Section(s): Section 13, T 11 S, R 64 W							
Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)	Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)
5	3.4	0.000	0.01	155	3.4	0.112	3.34
10	3.4	0.001	0.03	160	3.4	0.116	3.45
15	3.4	0.002	0.06	165	3.4	0.120	3.57
20	3.4	0.004	0.12	170	3.4	0.124	3.68
25	3.4	0.006	0.19	175	3.4	0.128	3.79
30	3.4	0.009	0.27	180	3.4	0.131	3.91
35	3.4	0.012	0.37	185	3.4	0.135	4.02
40	3.4	0.016	0.48	190	3.4	0.139	4.13
45	3.4	0.020	0.59	195	3.4	0.143	4.24
50	3.4	0.024	0.71	200	3.4	0.146	4.35
55	3.4	0.028	0.83	205	3.4	0.150	4.46
60	3.4	0.032	0.96	210	3.4	0.153	4.56
65	3.4	0.037	1.09	215	3.4	0.157	4.67
70	3.4	0.041	1.21	220	3.4	0.161	4.77
75	3.4	0.045	1.34	225	3.4	0.164	4.88
80	3.4	0.050	1.47	230	3.4	0.168	4.98
85	3.4	0.054	1.60	235	3.4	0.171	5.09
90	3.4	0.058	1.73	240	3.4	0.174	5.19
95	3.4	0.063	1.86	245	3.4	0.178	5.29
100	3.4	0.067	1.99	250	3.4	0.181	5.39
105	3.4	0.071	2.12	255	3.4	0.185	5.49
110	3.4	0.075	2.24	260	3.4	0.188	5.59
115	3.4	0.080	2.37	265	3.4	0.191	5.69
120	3.4	0.084	2.49	270	3.4	0.195	5.79
125	3.4	0.088	2.62	275	3.4	0.198	5.88
130	3.4	0.092	2.74	280	3.4	0.201	5.98
135	3.4	0.096	2.86	285	3.4	0.204	6.08
140	3.4	0.100	2.98	290	3.4	0.207	6.17
145	3.4	0.104	3.10	295	3.4	0.211	6.27
150	3.4	0.108	3.22	300	3.4	0.214	6.36

Created by JDS-Hydro Consultants, Inc. on November 12, 2019
Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

Stream Depletion for Jolene Owens
Pumping Rate of 3.36 acre-feet per year for 300 Years from the Dawson aquifer

	Kiowa Bijou Designated		Upper Big Sandy Designated		Upper Black Squirrel			
	KIOWA		BIG SANDY		BLACK SQUIRREL-UBSCDB		TOTAL	
Time	q/Q	vol./yr	q/Q	vol./yr	q/Q	vol./yr	q/Q	vol./yr
(yr)	(%)	(af/yr)	(%)	(af/yr)	(%)	(af/yr)	(%)	(af/yr)
0	0.00	0.000	0.00	0.000	0.00	0.000	0.00	0.000
5	0.01	0.000	0.00	0.000	0.00	0.000	0.01	0.000
10	0.03	0.001	0.00	0.000	0.00	0.000	0.03	0.001
15	0.06	0.002	0.00	0.000	0.00	0.000	0.06	0.002
20	0.12	0.004	0.00	0.000	0.00	0.000	0.12	0.004
25	0.19	0.006	0.00	0.000	0.00	0.000	0.19	0.006
30	0.27	0.009	0.00	0.000	0.00	0.000	0.27	0.009
35	0.37	0.012	0.00	0.000	0.00	0.000	0.37	0.012
40	0.48	0.016	0.00	0.000	0.00	0.000	0.48	0.016
45	0.59	0.020	0.00	0.000	0.00	0.000	0.59	0.020
50	0.71	0.024	0.00	0.000	0.00	0.000	0.71	0.024
55	0.83	0.028	0.00	0.000	0.00	0.000	0.83	0.028
60	0.96	0.032	0.00	0.000	0.00	0.000	0.96	0.032
65	1.08	0.036	0.00	0.000	0.00	0.000	1.09	0.037
70	1.21	0.041	0.00	0.000	0.00	0.000	1.21	0.041
75	1.34	0.045	0.00	0.000	0.00	0.000	1.34	0.045
80	1.47	0.049	0.00	0.000	0.00	0.000	1.47	0.050
85	1.60	0.054	0.00	0.000	0.00	0.000	1.60	0.054
90	1.73	0.058	0.00	0.000	0.00	0.000	1.73	0.058
95	1.86	0.062	0.01	0.000	0.00	0.000	1.86	0.063
100	1.98	0.067	0.01	0.000	0.00	0.000	1.99	0.067
105	2.11	0.071	0.01	0.000	0.00	0.000	2.12	0.071
110	2.23	0.075	0.01	0.000	0.00	0.000	2.24	0.075
115	2.36	0.079	0.01	0.000	0.00	0.000	2.37	0.080
120	2.48	0.083	0.01	0.000	0.00	0.000	2.49	0.084
125	2.60	0.087	0.01	0.000	0.00	0.000	2.62	0.088
130	2.72	0.091	0.02	0.001	0.00	0.000	2.74	0.092
135	2.84	0.095	0.02	0.001	0.00	0.000	2.86	0.096
140	2.96	0.099	0.02	0.001	0.00	0.000	2.98	0.100
145	3.07	0.103	0.02	0.001	0.00	0.000	3.10	0.104
150	3.19	0.107	0.02	0.001	0.00	0.000	3.22	0.108
155	3.31	0.111	0.03	0.001	0.00	0.000	3.34	0.112
160	3.42	0.115	0.03	0.001	0.00	0.000	3.45	0.116
165	3.53	0.119	0.03	0.001	0.00	0.000	3.57	0.120
170	3.64	0.122	0.04	0.001	0.00	0.000	3.68	0.124
175	3.75	0.126	0.04	0.001	0.00	0.000	3.79	0.128
180	3.86	0.130	0.04	0.001	0.01	0.000	3.91	0.131
185	3.97	0.133	0.04	0.002	0.01	0.000	4.02	0.135
190	4.07	0.137	0.05	0.002	0.01	0.000	4.13	0.139
195	4.18	0.141	0.05	0.002	0.01	0.000	4.24	0.143
200	4.28	0.144	0.06	0.002	0.01	0.000	4.35	0.146
205	4.39	0.148	0.06	0.002	0.01	0.000	4.46	0.150
210	4.49	0.151	0.06	0.002	0.01	0.000	4.56	0.153
215	4.59	0.154	0.07	0.002	0.01	0.000	4.67	0.157
220	4.69	0.158	0.07	0.002	0.01	0.000	4.77	0.161
225	4.79	0.161	0.07	0.003	0.01	0.000	4.88	0.164
230	4.89	0.164	0.08	0.003	0.01	0.000	4.98	0.168
235	4.99	0.168	0.08	0.003	0.02	0.001	5.09	0.171
240	5.08	0.171	0.09	0.003	0.02	0.001	5.19	0.174
245	5.18	0.174	0.09	0.003	0.02	0.001	5.29	0.178
250	5.27	0.177	0.10	0.003	0.02	0.001	5.39	0.181
255	5.37	0.180	0.10	0.003	0.02	0.001	5.49	0.185
260	5.46	0.184	0.11	0.004	0.02	0.001	5.59	0.188
265	5.55	0.187	0.11	0.004	0.02	0.001	5.69	0.191
270	5.65	0.190	0.12	0.004	0.03	0.001	5.79	0.195
275	5.74	0.193	0.12	0.004	0.03	0.001	5.88	0.198
280	5.83	0.196	0.12	0.004	0.03	0.001	5.98	0.201
285	5.91	0.199	0.13	0.004	0.03	0.001	6.08	0.204
290	6.00	0.202	0.13	0.005	0.03	0.001	6.17	0.207
295	6.09	0.205	0.14	0.005	0.04	0.001	6.27	0.211
300	6.18	0.208	0.14	0.005	0.04	0.001	6.36	0.214

Created by JDS-Hydro Consultants, Inc. on November 12, 2019
Values for q/Q are not calculated when the pumping rate (Q) is changed to anything but zero.

Appendix C

Appendix C: Estimated Groundwater Volumes for Jolene Owens Property

Location: SW 1/4 of NW 1/4 of Section 13, Township 11 S, Range 64 W

Surface Area: 38.8 Acres

Number of lots / wells: 7

Designated Basin: Kiowa-Bijou

Management District: Kiowa-Bijou

Aquifer	*Original 100-year decreed supply (AF/year)*	*100-year supply deeded with land sale (AF/year)* [5]	*Remaining 100-year supply at Owens property (AF/year)*	*Remaining 300-year supply at Owens property (AF/year)*
Dawson (NNT)[1]	22.4	12.28	10.1	3.37
Denver (NT)[2]	38.0	18.21	19.8	6.60
Upper Arapahoe (NT)[3]	29.1	13.92	15.2	5.06
Laramie-Fox Hills (NT)[4]	24.6	11.78	12.8	4.27

Note 1: 100-year average annual amount of ground water withdrawal of Dawson water established in Determination No. 1588-BD

Note 2: 100-year average annual amount of ground water withdrawal of Denver water established in Determination No. 1587-BD

Note 3: 100-year average annual amount of ground water withdrawal of Arapahoe water established in Determination No. 1586-BD

Note 4: 100-year average annual amount of ground water withdrawal of LFH water established in Determination No. 1585-BD

Note 5: Denver basin allocations to purchased property is described in Special Warranty Deed to Mirmohammad Adili and Madonna Lee Suarez

SPECIAL WARRANTY DEED
(Water Rights)

For Ten Dollars, and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, ALICE J. OWENS ("Grantor") sells and conveys to MIRMOHAMMAD ADILI and MADONNA LEE SUAREZ, as joint tenants (collectively "Grantee"), whose address is 18430 Lost Ranger Road, Peyton, Colorado 80831, all of Grantor's right, title and interest in and to the following described water, water rights and related interests located in El Paso County, Colorado:

Any and all water rights, and rights to extract and use ground water appurtenant to, underlying, or associated with the approximate 35.7 acres of real property more particularly described on the attached **Exhibit A** and incorporated by this reference (the "Property"), specifically including:

Any and all Denver Basin ground water, water rights, and rights to extract groundwater, whether adjudicated, unadjudicated or inchoate, specifically including but not limited to, that portion of Denver Basin groundwater underlying the Property, as quantified and determined by the Colorado Ground Water Commission in Determination Nos. 1585-BD, 1586-BD, 1587-BD and 1588-BD (collectively, the "Determinations") which were recorded on July 9, 2008 at Reception Nos. 208078396, 208078395, 208078394, and 208078393, , records of El Paso County, Colorado. Said pro-rata allocation of the portion of the groundwater in the Determinations which underlies the Property specifically includes:

(a) 9.28 annual acre feet of not-nontributary groundwater from underlying Dawson aquifer as described in Determination No. 1588-BD, and the 3-annual acre feet exempted from determination therein for use in small capacity DWR Well Permit No. 260301, as associated with the Property;

(b) 18.21 annual acre feet of nontributary groundwater from the underlying Denver aquifer as described in Determination No. 1587-BD;

(c) 13.92 annual acre feet of nontributary groundwater from the underlying Arapahoe aquifer as described in Determination No. 1586-BD; and

(d) 11.78 annual acre feet of nontributary groundwater from the underlying Laramie-Fox Hills aquifer as described in Determination No. 1585-BD.

The above described conveyance of groundwater underlying the Property, as allocated on a pro rata-per-acre basis to the Property, expressly does not include any groundwater, whether nontributary or not nontributary, underlying any real property other than that described in **Exhibit A**. Grantor reserves all other groundwater rights quantified and determined under the Determinations.

Grantor warrants title against any and all claims arising by, through or under Grantor.

Executed this ___ day of _____, 2018.

_____
Alice J. Owens

STATE OF COLORADO)
) ss.
COUNTY OF EL PASO)

The foregoing document was acknowledged before me this ___ day of _____, 2018 by Alice J. Owens.

Witness my hand and official seal.

_____
Notary Public

My commission expires:_____

EXHIBIT A
LEGAL DESCRIPTION OF THE PROPERTY

THE NW 1/4 OF THE NW1/4 OF SECTION 13, TOWNSHIP 11 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EXCEPT THAT PARCEL DESCRIBED IN DEED AT RECEPTION NO. 095090782, COUNTY OF EL PASO, STATE OF COLORADO

CONTAINING 35.7 ACRES MORE OR LESS

The legal description was provided by:
Garry L. Rohleder, for and on behalf of
WLR Services
13609 County Rd. 94
Elbert, CO 80104

COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE KIOWA BIJOU DESIGNATED GROUND WATER BASIN

APPLICANT: ALICE JOLENE OWENS

AQUIFER: LARAMIE-FOX HILLS

DETERMINATION NO.: **1585-BD**

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Alice Jolene Owens (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills Aquifer.

FINDINGS

1. The application was received complete by the Colorado Ground Water Commission on March 11, 2008.

2. The applicant requests a determination of rights to designated ground water in the Laramie-Fox Hills Aquifer (hereinafter "aquifer") underlying 74.5 acres, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated March 12, 2008, the applicant owns the 74.5 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.

3. The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.

4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Kiowa Bijou Designated Ground Water Basin. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.

5. The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The applicant's proposed place of use of the allocated ground water is the above described 74.5 acre land area.

6. The quantity of water in the aquifer underlying the 74.5 acres of land claimed by the applicant is 2459 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:

   a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 15 percent.

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 220 feet.

7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.

8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 74.5 acres of overlying land claimed by the applicant is 24.6 acre-feet.

9. A review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.

10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.

11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will not, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. No more than 98% of the amount of ground water withdrawn annually shall be consumed, as required by the Designated Basin Rules.

13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.

14. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

15. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on April 3 and April 10, 2008.

16. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.

17. In order to prevent unreasonable impairment to the existing water rights of others within the Kiowa Bijou Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Laramie-Fox Hills Aquifer underlying 74.5 acres of land, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, is approved subject to the following conditions:

18. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 24.6 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.

19. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.

20. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.

21. No more than 98% of the ground water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the water withdrawn is being consumed.

22. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The place of use shall be limited to the above described 74.5 acre land area.

23. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county - in which the claimed overlying land is located - notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 74.5 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.

24. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:

    a. The wells shall be located on the above described 74.5 acre overlying land area.

    b. The wells must be constructed to withdraw water from only the Laramie-Fox Hills Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.

    c. The entire depth of each well must be geophysically logged prior to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

    d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.

    e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission upon their request.

    f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.

26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 74.5 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Dated this 20th day of May, 2008.

Dick Wolfe

Dick Wolfe, P.E
Executive Director
Colorado Ground Water Commission

By: Keith Vanden Horst

Keith Vander Horst, P.E.
Water Resource Engineer

Prepared by: MAP

F&O1585-BD

GWS 1
03/2005

EXHIBIT A

1585-BD

Page 1 of 4

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St. Room 821
Denver, CO 80203
(303) 866-3581 Fax (303) 866-3589

RECEIVED

MAR 11 2008

WATER RESOURCES
STATE ENGINEER
COLO

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (We) Alice Jolene Owens
(Name(s))

claim and say that I (we) am (are) the owner(s) of the following described property consisting of 74.50 acres in the County of El Paso, State of Colorado:

(Insert the property legal description)
TR IN W2NW4 SEC 13-11-64
(Refer to attachment)

and, that the ground water sought to be withdrawn from the Laramie-Fox Hills aquifer underlying the above-described land has not been conveyed or reserved to another, nor has consent been given to its withdrawal by another.

Further, I (we) claim and say that I (we) have read the statements made herein; know the contents hereof; and that the same are true to my (our) knowledge.

Alice Jolene Owens 3/12/08
Signature Date

Signature Date

INSTRUCTIONS:
Please type or print neatly in black or blue ink. This form may be reproduced by photocopy or word processing means. See additional information on the reverse side.

ASSESSOR PROPERTY APPRAISAL INFORMATION
EL PASO COUNTY

Parcel No: 41000-00-306 **Master Parcel No:** 41000-00-136

Owner: OWENS ALICE J
PO BOX 322
PEYTON, CO 80831-0322

EXHIBIT A
1585-BD
Page 2 of 4

Location: RED BARN RD

Legal Description: TR IN W2NW4 SEC 13-11-64 DESC AS FOLS; COM AT NW COR OF SD SEC 13; TH S 89<02'04'' E 300.00 FT TO POB; TH S 00<39'33'' W 435.60 FT, N 89<02'04'' W 300.00 FT, S 00<39'33'' W 2202.71 FT TO W4 COR OF SD SEC 13, ELY ALG E/W C/L 1286.16 FT M/L TO SE COR OF SD W2NW4, NLY 2631.43 FT M/L ALG ELY LN OF SD W2NW4 TO NE COR THEREOF, TH WLY 977.34 FT M/L ALG N SEC LN TO POB

Txd	Levy	Neighborhood	Plat	Create Date
MBM	51.976	95	0	05/02/1996

	Use Code	Area	Assessed Value	Market Value	Appraisal Date
Land:	85	74.50AC	790	2741	3/07
Totals:			790	2741	

Sales:

Date	Sale Price	Doc Fee	Reception #	Sale Code	# Parcels
08/15/1996		0.00	96103570		0

Taxing Entities	Mill Rate
EL PASO COUNTY	7.514
PEYTON SCHOOL NO. 23	35.000
PIKES PEAK LIBRARY	3.325
PEYTON FIRE DISTRICT	6.137
KIOWA CONSERVATION DISTRICT	
2007 Tax Rate:	51.976 mills

Mark Lowderman
Assessor, El Paso County

Please note that appraisal records are subject to change without notification.

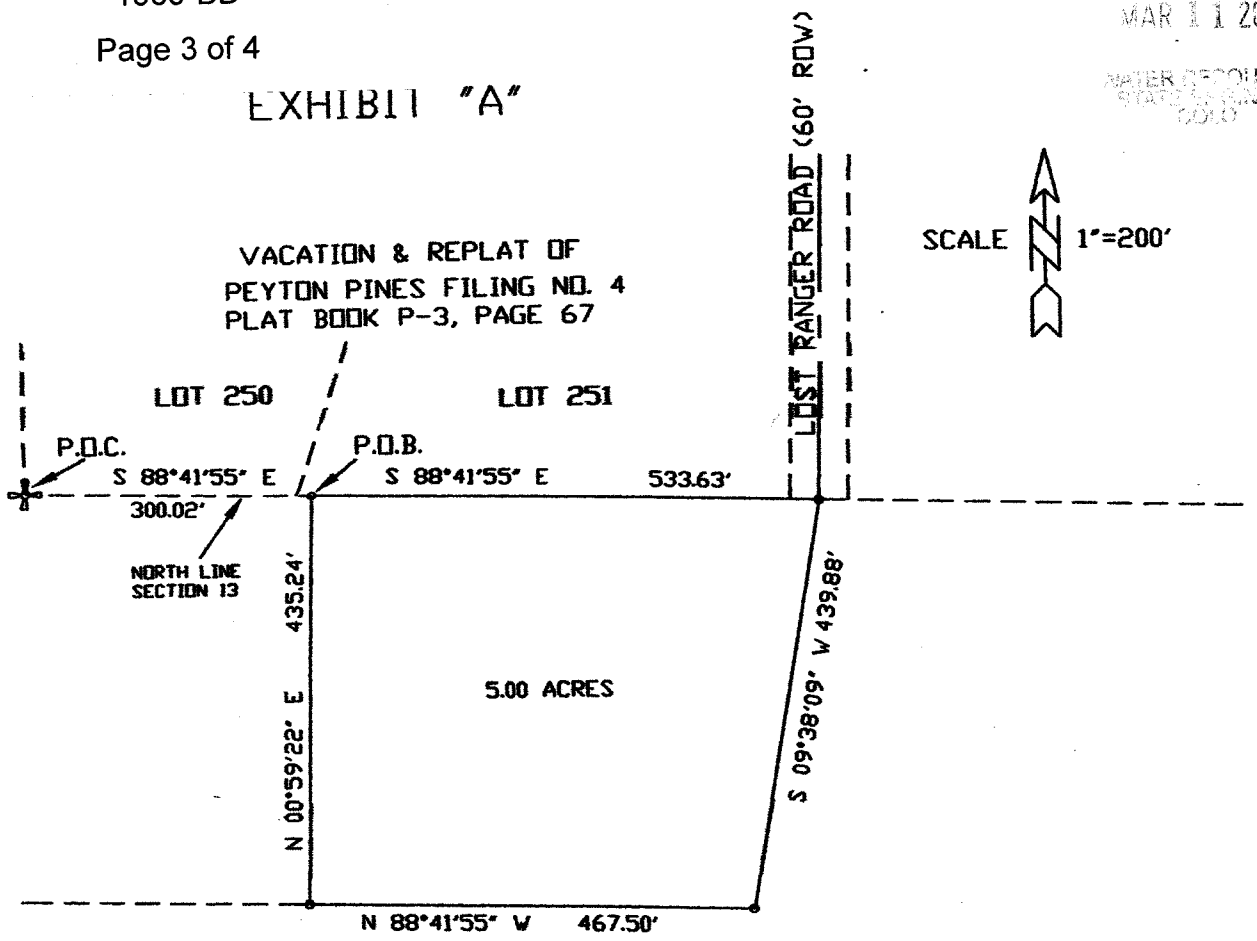
Printed: 04/01/2008 **By:** AMIDEI

This is a 5 acre parcel with an existing well.
This 5 acres is included in the 74.50 acreage amount.

EXHIBIT A

1585-BD

EXHIBIT "A"



UNITED
ENGINEERING
PLANNING

4575 GALLEY ROAD SUITE 200
COLORADO SPRINGS COLORADO
(719) 597-9900 80915

PROJECT	DATE	DRAWN
05-0102	1-26-05	J.L.K.

C:\Projects 2005\05-0102\05-0102.dwg

UNITED
PLANNING &
ENGINEERING

planners • consultants • engineers • landscape architects • surveyors

(719) 597-9900 FAX (719) 597-9905

EXHIBIT A

JANUARY 25, 2005

1585-BD

LEGAL DESCRIPTION:

A PORTION OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 11 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE S 88°41'55" E ALONG THE NORTH LINE OF SAID SECTION 13, 300.02 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID NORTH LINE, S 88°41'55" E, 533.63 FEET; THENCE S 09°38'09" W, 439.88 FEET; THENCE N 88°41'55" W PARALLEL TO SAID NORTH LINE, 467.50 FEET; THENCE N 00°59'22" E, 435.24 FEET TO THE POINT OF BEGINNING AND CONTAINING 5.000 ACRES MORE OR LESS. (SEE EXHIBIT "A")

34

34

COLORADO GROUND WATER COMMISSION
DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 Sherman St, Room 818, Denver, CO 80203

RECEIVED

MAR 11 2008

WATER RESOURCES
STATE ENGINEER
COLO

APPLICATION FOR DETERMINATION OF WATER RIGHT WITHIN A DESIGNATED GROUND WATER BASIN PURSUANT TO SECTION 37-90-107(7), C.R.S.

Please note: This application may only be used to apply for a determination of rights to ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer underlying land areas located within a Designated Ground Water Basin. Review the instructions on the reverse of this form. This form must be completed, signed, dated and submitted to the Ground Water Commission with a non-refundable $60 filing fee. A separate form must be used for each aquifer determination. Type or print in black ink.

1. APPLICANT INFORMATION

Name of Applicant: Alice Jolene Owens

Applicant Mailing Address: 18430 Lost Ranger Rd. Peyton, Co. 80831

Applicant Telephone Number (include area code): 719-596-7447

2. AMOUNT OF OVERLYING LAND – the total land area claimed and described by the applicant in Item #8 below, consisting of 74.50 acres.

3. AQUIFER: Laramie-Fox Hills

4. EXISTING WELLS – Are there any wells located on the claimed and described overlying land? Yes____ No____
If yes, provide a complete list of all wells located on the overlying land area as an attachment to this application.

5. ANNUAL AMOUNT OF GROUND WATER – to be withdrawn, for intended beneficial uses, from the aquifer underlying the described land area claimed by the applicant in Item #8 below. Please specify one of the following:

- [X] Maximum allowable annual acre-feet
- [ ] _____ acre-feet annually
- [ ] Maximum allowable annual acre-feet, excluding _____ acre-feet from that amount

6. USE OF GROUND WATER – description of intended beneficial uses of the ground water to be withdrawn from the aquifer

Domestic, stock watering, irregation, Commercial and replacement Supply

7. PLACE OF USE – of the ground water shall be considered to be that overlying land area claimed and described by the applicant in Item #8 below, unless a legal description or accurate scale map is provided which describes an alternate/additional place of use.

8. REQUIRED LANDOWNERSHIP DOCUMENTATION - The Ground Water Commission shall allocate ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer on the basis of ownership of overlying land. For this reason, a Nontributary Ground Water Landownership Statement (form GWS-1) or Nontributary Ground Water Consent Claim (form GWS-48), including a description of the overlying land area subject to this determination, must be submitted as an attachment to the application.

9. SIGNATURE OF APPLICANT - must be original signature – The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.

Signature: Alice Jolene Owens Date: 3/12/08

- print name and title: Alice Jolene Owens Owner

FOR OFFICE USE ONLY

Trans Number: 3626760
3/11/2008 2:33:54 PM
James Martin (19)
Total Trans Amt: $60.00
CHECK
Check Number: 12973
Check Amount: $60.00

DIV 8 CO ____ WD 1 BASIN 2 MD ____

Form GWS-53 (6/2006)

El Paso County, Colorado

SANDRA J. DAMRON, TREASURER

DATE January 9, 2008

PROPERTY TAX STATEMENT
TAXES FOR 2007 DUE 2008

21554

TYPE OF PROPERTY
REAL PROPERTY

SCHEDULE (ACCOUNT) NUMBER
41000-00-306

PROPERTY LOCATION
0 RED BARN RD

PROPERTY DESCRIPTION
TR IN W2NW4 SEC 13-11-64 DESC AS FOLS; COM AT NW COR OF SD SEC 13; TH S 89<02'04" E 300.00 FT TO POB; TH S 00<39'33" W 435.60 FT, N 89<02'04" W 300.00 FT, S 00<39'33" W 2202.71 FT TO W4 COR OF SD SEC 13, ELY ALG E/W C/L 1286.16 FT M/L TO SE COR OF SD W2NW4, NLY 2631.43 FT M/L ALG *** DESCRIPTION INCOMPLETE ***

AUTO********5-DIGIT 80831
41000-00-306
OWENS ALICE J
PO BOX 322
PEYTON CO 80831-0322

TAX DISTRICT	MBM	ACTUAL VALUE	$ 2,741	ASSESSED VALUE	$ 790

TAX RATE	TAX AUTHORITY		TAX AMOUNT
0.006234	EL PASO COUNTY		4.92
0.001280	EPC ROAD & BRIDGE (UNSHARED)		1.01
0.021479	PEYTON SCHOOL NO. 23	- GEN	16.97
0.013521	PEYTON SCHOOL NO. 23	- BOND	10.68
0.003325	* PIKES PEAK LIBRARY		2.63
0.006137	PEYTON FIRE DISTRICT		4.85
	*TEMPORARY TAX RATE REDUCTION/TAX CREDIT		
0.051976	**TOTAL TAX RATE**	**TOTAL TAXES PAYABLE**	**$ 41.06**

NOTE: If you have a mortgage and are unsure about escrowing for payment of taxes, please call your lender prior to making payment.

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

March 25, 2008

Alice J. Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Determinations of Water Right; Receipt Numbers 3626760, 3626753, 3626757, and 3626756

Dear Ms. Owens,

This office is processing your applications for Determination of Water Right for the Denver Basin aquifers. The property description that you have submitted as an attachment, which is a copy of your property tax statement, does not contain a complete legal description of your property. The complete legal description is mandatory for the issuing of the Findings and Order which will define your water right.

Before the Findings and Orders are issued, the evaluations must be completed, the determinations published and an objection period of 30 days after publication must pass. You have several weeks to furnish the complete legal description of your property to this office. I am returning your incomplete property descriptions in this letter. Please have the correct and complete legal description, one copy for each determination, returned to me at this office before May 5, 2008.

If you have any questions, please call me at the above number.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resource Engineer
Designated Basins Branch

Enclosures

DETERMINATION OF WATER RIGHT EVALUATION SHEET
SECTION 37-90-107(7)

APPLICANT: **Owens, Alice Jolene**

BASIN: Kiowa-Bijou GWMD: None

COUNTY: El Paso

AQUIFER: **Laramie-Fox Hills** RECEIPT NO. 3626760

NUMBER OF ACRES IN TRACT: 74.5

GENERAL LOCATION: W1/2 of the NW1/4 of Section 13, T11S, R64W

AQUIFER DATA

AMOUNT AVAILABLE FOR APPROPRIATION: (220 SS)(74.5 Acres)(0.15 SY) = 2458.5 AF = 24.6 AFyr

ADJUSTMENTS: None

ANNUAL AMOUNT: **24.6 AFyr**

PRE.NOV.19, 1973 WELLS (COMPLETED IN AQUIFER) IN VICINITY:

AREA CHECKED: Sections 11, 12, 13, 14, 23, 24 in T11S, R64W
Sections 7, 18, 19 in T11S, R63W

SMALL-CAPACITY WELLS (COMPLETED IN AQUIFER) LOCATED ON CLAIMED TRACT: None

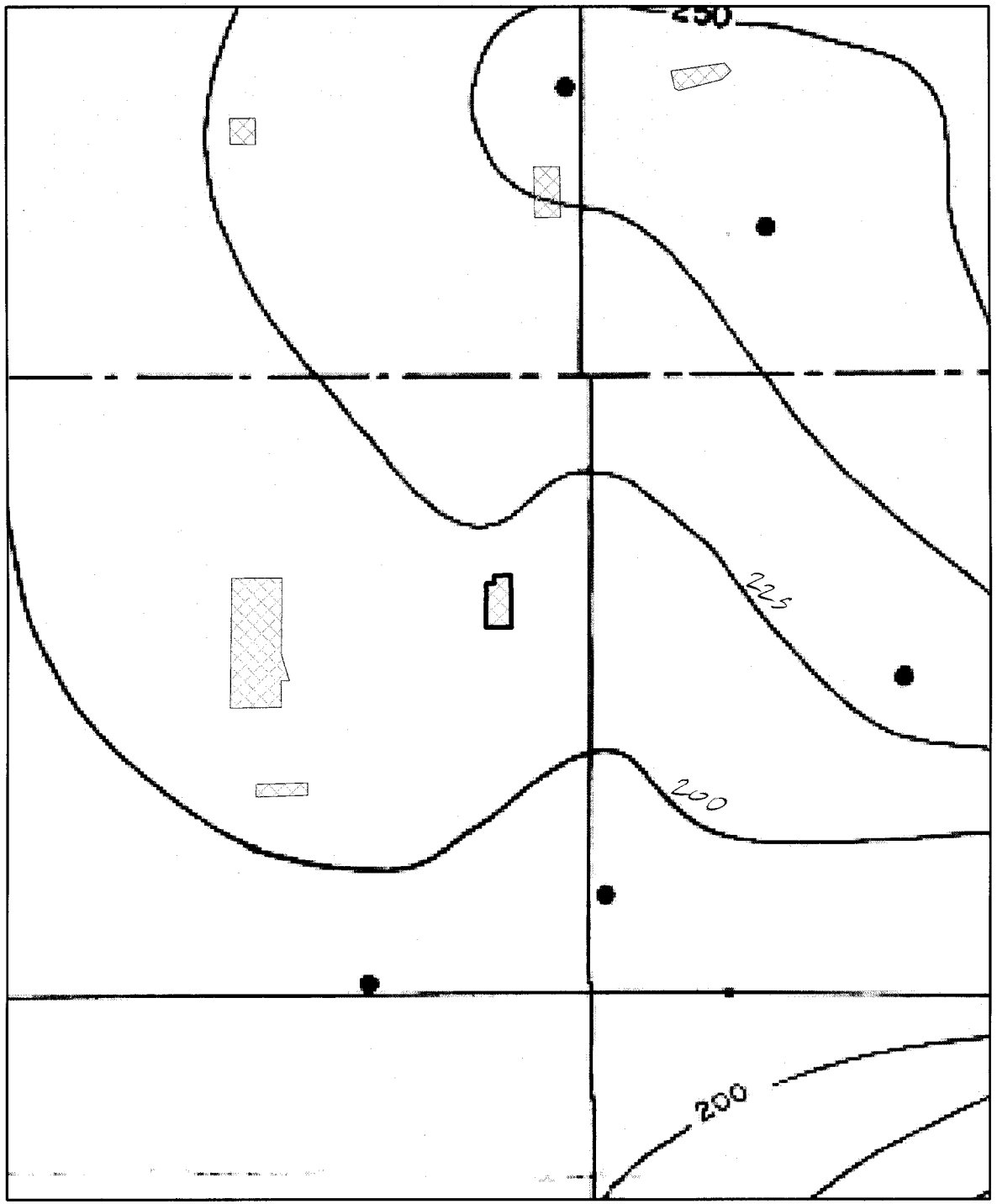
REPLACEMENT WATER STATUS OF CLAIMED LAND AREA: **Nontributary**

REPLACEMENT PLAN REQUIRED: No

AQUIFER INTERVAL (CENTRAL DATA POINT): 2400 to 2800 bgs

COMMENTS: The SS was considered to be 220 feet based on the SS map for the Laramie-Fox Hills aquifer.

Evaluated by MAP, 3/26/2008
Reviewed by SKR, Ground Water Commission Staff



COLORADO DIVISION OF WATER RESOURCES

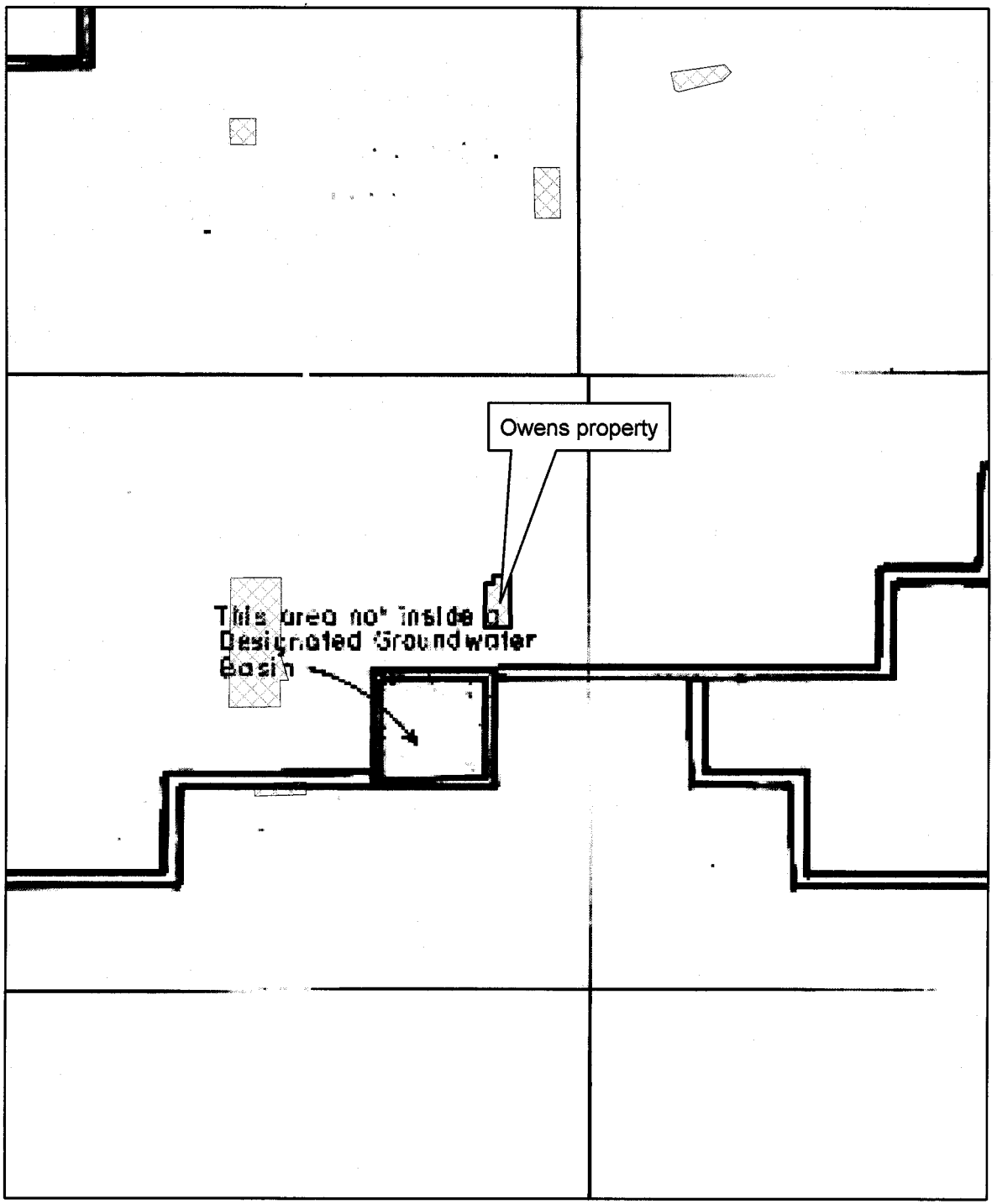
BASIN: Kiowa Bijou

Saturated Sands map
Laramie-Fox Hills aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

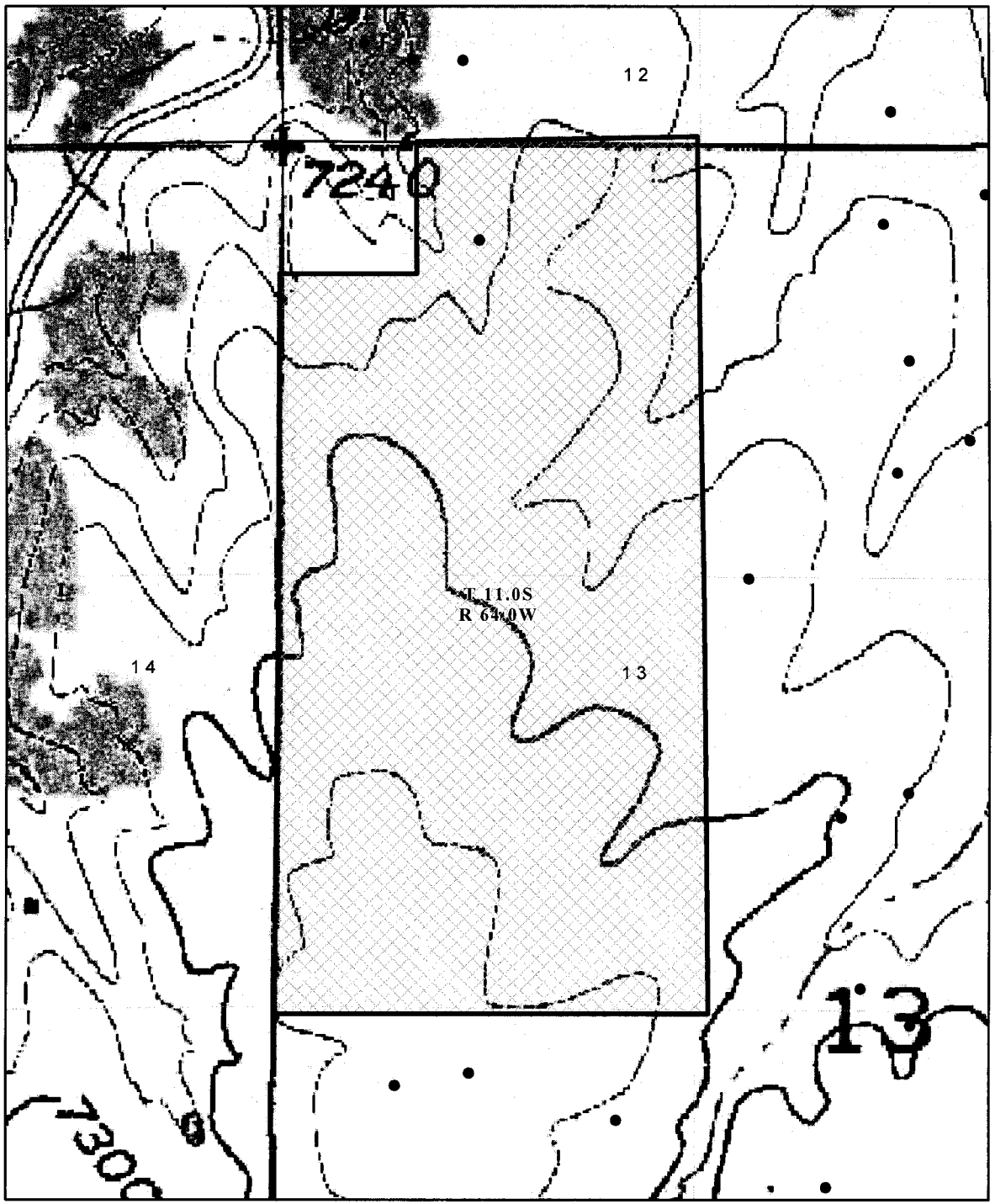
Tributary map
Laramie-Fox Hills aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NT

N



COLORADO DIVISION OF WATER RESOURCES

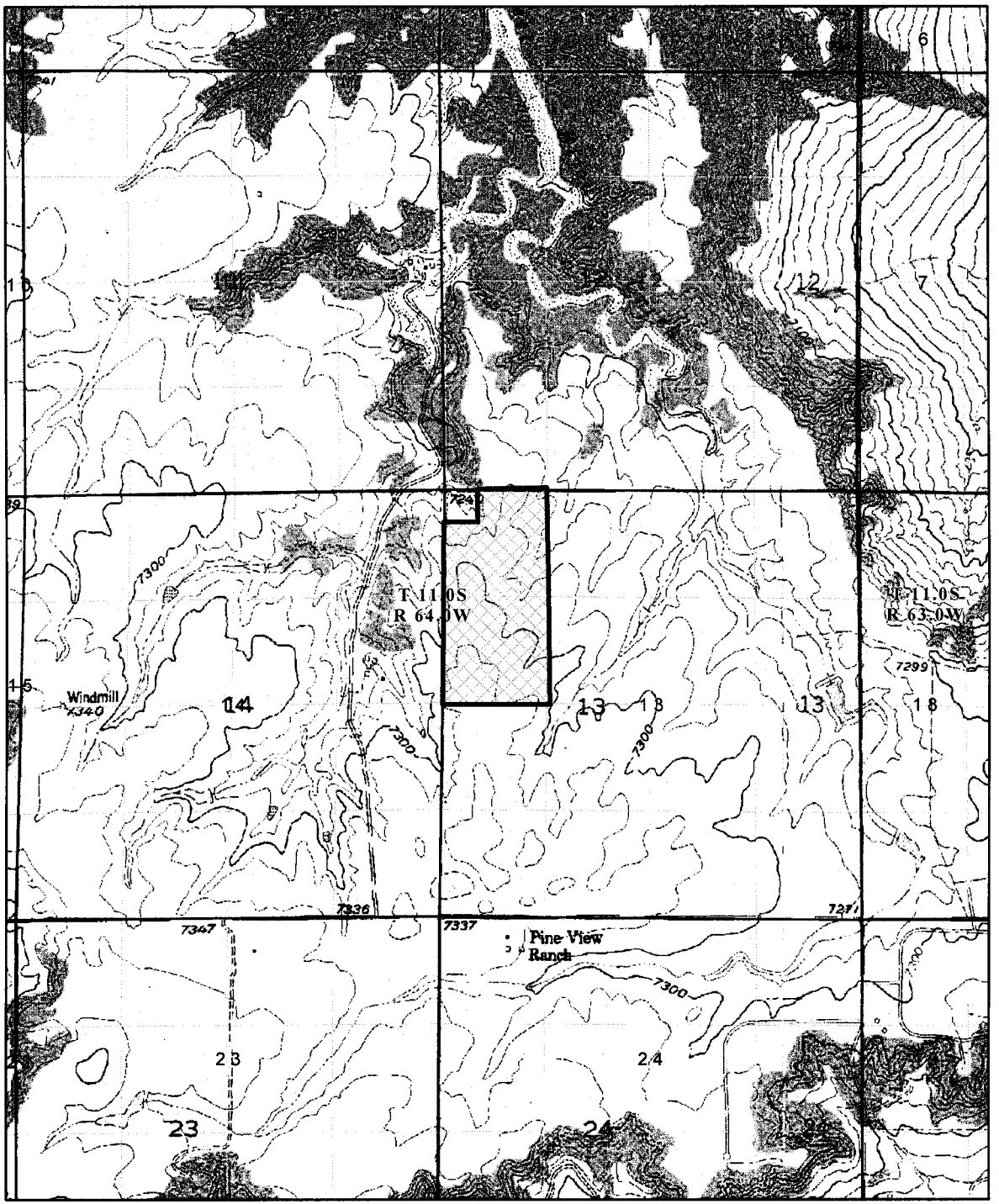
BASIN: Kiowa Bijou

Wells

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

Property Location

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

May 20, 2008

Alice Jolene Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Determination of Water Right

Dear Ms. Owens:

Enclosed are 2 copies of the Colorado Ground Water Commission's Findings and Order for Determination of Water Right No. **1585-BD**, for the allocation of ground water in the **Laramie-Fox Hills** aquifer. This Findings and Order is the Commission's approval of your application for determination of rights to ground water in the above stated aquifer. This document contains important information about your water right and should be reviewed and retained for your records.

As indicated in the Order, a copy of this determination must be recorded by the applicant in the public records of the county – in which the overlying land is located – so that a title examination of the overlying land claimed in the application, or any part thereof, shall reveal this determination. An additional copy of the Findings and Order is enclosed for this purpose.

If you have any questions, please contact this office.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resources Engineer
Designated Basins Team

enclosures: a/s

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

March 26, 2008

Alice J. Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Applications for Determinations of Water Right to Appropriate Ground Water from the Laramie-Fox Hills, Arapahoe, Lower Dawson and Denver Aquifers Underlying a 74.5-Acre Tract

Receipt Nos. 3626760, 3626753, 3626757, 3626756
Applicant: Alice Jolene Owens

Dear Ms. Owens:

Enclosed is a copy of the legal notice to be published in the Ranchland News newspaper as required for the above described applications. If you find any error or omission in the notice, please contact me by phone as soon as possible so that corrections may be made prior to publication.

This office will bill the applicant at a later time for the actual cost of this publication. If you have any questions, please call me.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resource Engineer
Designated Basins Branch

Enclosures: a/s

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

March 26, 2008

ELECTRONIC TRANSMISSION

Ranchland News
PO Box 307
Simla, CO 80835

To Whom It May Concern:

Please publish the enclosed legal notices in your editions of April 3 and April 10, 2008, or as close to these dates as possible. Please single-space all the enclosed material in your standard single column legal notice format. Font size shall not be less than six-point type and not more than nine-point in size.

Prior to publishing the legal notice, a "proof copy" must be submitted to this office for approval. This "proof copy" will be inspected by the Division staff and a reply as to its correctness will be made immediately by phone or in writing. This "proof copy" should be directed my attention at the above address by mail, by **FAX at 303-866-3589 or email at Melissa.A.Peterson@state.co.us.**

Upon publication, please send a copy of the newspaper, in which the notice is printed, to my attention at the above address. This copy is needed immediately to respond to questions from the general public.

Please submit four copies of your billing, including the cost of the single copy of the newspaper and postage and handling to:

Colorado Ground Water Commission
1313 Sherman Street, Room 818
Denver, Colorado 80203

We have been advised by the State Controller and the State Purchasing Agent that we must request four copies of the billing and four copies of the proof of publication. Two copies of the proof of publication must be notarized. Since we must re-bill the applicant prior to approval, please transmit the billing and proofs of publication as soon as possible.

Should you have any questions concerning publication of this notice, please contact me.

Sincerely,

Melissa A. Peterson, PE
Water Resource Engineer
Designated Basins Team

Enclosure (a/s)

cc: Applicant
Robert R. Loose, Colorado Ground Water Commission

BEFORE THE COLORADO GROUND WATER COMMISSION

KIOWA BIJOU DESIGNATED GROUND WATER BASIN– EL PASO COUNTY

TAKE NOTICE that pursuant to Section 37-90-107(7), C.R.S., Alice J. Owens (hereinafter "applicant") has applied for determinations of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills, Arapahoe, Denver and Dawson aquifers underlying 74.5 acres generally described as W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th P.M. The applicant claims ownership of this land and control of the ground water in the above-described aquifers under this property. The ground water allocations from these aquifers will be used on the described property for the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The maximum allowable annual amount of ground water in each aquifer underlying the described property will be allocated.

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, the Colorado Ground Water Commission shall allocate ground water from the above-described aquifers based on ownership of the overlying land and an aquifer life of one hundred years. A preliminary evaluation of the applications by the Commission Staff finds the annual amount of water available for allocation from each of the described aquifers underlying the above-described property to be as follows: 24.6 acre-feet for the Laramie-Fox Hills, 29.1 acre-feet for the Arapahoe, 38.0 acre-feet for the Denver, and 18.6 acre-feet for the Dawson, subject to final staff evaluation. The estimated available annual acre-feet allocation amount for each aquifer indicated above may be increased or decreased by the Commission to conform to the actual aquifer characteristics, based upon site specific data. The amount for the Dawson aquifer represents a reduction in the initial annual amount determined to be available to allow for the annual withdrawal of a small-capacity well located on the described property area, permit no. 260301.

In accordance with Rule 5.3.6 of the Designated Basin Rules, the Commission Staff's preliminary evaluation of the applications finds the replacement water requirement status for the above aquifers underlying the above-described property to be as follows: nontributary for the Laramie-Fox Hills, nontributary for the Arapahoe, nontributary for the Denver, and not-nontributary (actual impact replacement) for the Dawson.

Upon Commission approval of these determinations of water right, well permits for wells to withdraw the allowed allocation from a specific aquifer shall be available upon application, subject to the conditions of the determination and the Designated Basin Rules and subject to approval by the Commission. Such wells must be completed in the specified aquifer and located on the above described 74.5 acre property.

Any person wishing to object to the approval of these determinations of water right must do so in writing, briefly stating the nature of the objection and indicating the above applicant, property description and the specific aquifers that are the subject of the objection. The objection must be accompanied by a $10 fee and must be received by the Commission Staff, Colorado Ground Water Commission, 818 Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, by May 12, 2008.

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

I, Susan Lister, do solemnly affirm that I am the Publisher of RANCHLAND NEWS; that the same is a weekly newspaper published at Simla, County of Elbert, State of Colorado, and has a general circulation therein; that said newspaper has been continuously and uninterruptedly published in said County of Elbert for a period of at least 52 consecutive weeks next prior to the first publication of the annexed notice, that said newspaper is entered in the post office at Calhan, Colorado as second class mail matter and that said newspaper is a newspaper within the meaning of the Act of the General Assembly of the State of Colorado, approved March 30, 1923, and entitled "Legal Notices and Advertisements," with other Acts relating to the printing and publishing of legal notices and advertisements. That the annexed notice was published in the regular and entire issue of said newspaper, once each week for two successive weeks; that the first publication of said notice was in the issue of said newspaper dated:

April 3, 2008

and the last publication of said notice was in the issue of said newspaper dated:

April 10, 2008

and that copies of each number of said paper in which said notice and/or list was published were delivered by carriers or transmitted by mail to each of the subscribers of said newspaper, Ranchland News, according to the accustomed mode of business in this office.

Susan Lister
Publisher

The above certificate of publication was subscribed and affirmed to before me, a Notary Public, to be the identical person described in the above certificate, on the

10 day of April, 2008

Notary Public

1/22/12
(My Notary Public Commission Expiration Date)

Determinations of Water Right

BEFORE THE COLORADO GROUND WATER COMMISSION

KIOWA BIJOU DESIGNATED GROUND WATER BASIN– EL PASO COUNTY

TAKE NOTICE that pursuant to Section 37-90-107(7), C.R.S., Alice J. Owens (hereinafter "applicant") has applied for determinations of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills, Arapahoe, Denver and Dawson aquifers underlying 74.5 acres generally described as W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th P.M. The applicant claims ownership of this land and control of the ground water in the above-described aquifers under this property. The ground water allocations from these aquifers will be used on the described property for the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The maximum allowable annual amount of ground water in each aquifer underlying the described property will be allocated.

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, the Colorado Ground Water Commission shall allocate ground water from the above-described aquifers based on ownership of the overlying land and an aquifer life of one hundred years. A preliminary evaluation of the applications by the Commission Staff finds the annual amount of water available for allocation from each of the described aquifers underlying the above-described property to be as follows: 24.6 acre-feet for the Laramie-Fox Hills, 29.1 acre-feet for the Arapahoe, 38.0 acre-feet for the Denver, and 18.6 acre-feet for the Dawson, subject to final staff evaluation. The estimated available annual acre-feet allocation amount for each aquifer indicated above may be increased or decreased by the Commission to conform to the actual aquifer characteristics, based upon site specific data. The amount for the Dawson aquifer represents a reduction in the initial annual amount determined to be available to allow for the annual withdrawal of a small-capacity well located on the described property area, permit no. 260301.

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Upon Commission approval of these determinations of water right, well permits for wells to withdraw the allowed allocation from a specific aquifer shall be available upon application, subject to the conditions of the determination and the Designated Basin Rules and subject to approval by the Commission. Such wells must be completed in the specified aquifer and located on the above described 74.5 acre property.

Any person wishing to object to the approval of these determinations of water right must do so in writing, briefly stating the nature of the objection and indicating the above applicant, property description and the specific aquifers that are the subject of the objection. The objection must be accompanied by a $10 fee and must be received by the Commission Staff, Colorado Ground Water Commission, 818 Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, by May 12, 2008.

First Publication April 3, 2008
Final Publication April 10, 2008
In Ranchland News
Legal No. 12,842

Invoice	4/ 3/2008 DATE	5 NUMBER

Ranchland News
115 Sioux Avenue, PO Box 307
Simla CO 80835

ID# 192

Colorado Ground Water Commission
1313 Sherman Street, Room 818
Denver CO 80203

Date	Description	Units	Amount
04/03/2008	Legal - 11.5 Picas Owens, legal 12,842	81.000	40.01
04/10/2008	Legal - Rerun - 11.5 Picas Owens, legal 12,842	81.000	27.95
	******** Total		67.96

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

April 14, 2008

Alice J. Owens
18430 Lost Ranger Road
Peyton, CO 80831

Invoice No. 08-PUB-185

INVOICE

Pursuant to Section 37-90-116, C.R.S., applicants are required to pay for the actual expense of publication for determinations of water right, well permit and change of water right applications.

Your application for determination of water rights to appropriate ground water from the Arapahoe and Laramie-Fox Hills aquifers was published in The Ranchland News newspaper on March 20 and 27, 2008.

The following cost was incurred:

1. Actual cost of publication: $ 67.96

2. Additional fees: none

PAYABLE TO: DIVISION OF WATER RESOURCES $ 67.96

Your application can not be considered for approval until the charges are paid.
Please return the enclosed copy of this invoice with remittance within thirty (30) days.

(A copy of the publication affidavit is enclosed for your records.)

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resource Engineer
Designated Basin Branch

Enclosures

Trans Number: 3628280
4/22/2008 3:38:33 PM
Jay Bloomfield (16)
Total Trans Amt: $67.96
CREDIT CARD
Tender Amount: $67.96

Office of the State Engineer
1313 Sherman Street, Suite 818 • Denver, CO 80203 • Phone: 303-866-3581 • Fax: 303-866-3589
www.water.state.co.us

COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE KIOWA BIJOU DESIGNATED GROUND WATER BASIN

APPLICANT: ALICE JOLENE OWENS

AQUIFER: ARAPAHOE

DETERMINATION NO.: **1586-BD**

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Alice Jolene Owens (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Arapahoe Aquifer.

FINDINGS

1. The application was received complete by the Colorado Ground Water Commission on March 11, 2008.

2. The applicant requests a determination of rights to designated ground water in the Arapahoe Aquifer (hereinafter "aquifer") underlying 74.5 acres, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated March 12, 2008, the applicant owns the 74.5 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.

3. The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.

4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Kiowa Bijou Designated Ground Water Basin. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.

5. The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The applicant's proposed place of use of the allocated ground water is the above described 74.5 acre land area.

6. The quantity of water in the aquifer underlying the 74.5 acres of land claimed by the applicant is 2913 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:

   a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 230 feet.

7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.

8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 74.5 acres of overlying land claimed by the applicant is 29.1 acre-feet.

9. A review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.

10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.

11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will not, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. No more than 98% of the amount of ground water withdrawn annually shall be consumed, as required by the Designated Basin Rules.

13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.

14. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

15. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on April 3 and April 10, 2008.

16. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.

17. In order to prevent unreasonable impairment to the existing water rights of others within the Kiowa Bijou Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Arapahoe Aquifer underlying 74.5 acres of land, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, is approved subject to the following conditions:

18. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 29.1 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.

19. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.

20. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.

21. No more than 98% of the ground water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the water withdrawn is being consumed.

22. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The place of use shall be limited to the above described 74.5 acre land area.

23. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county - in which the claimed overlying land is located - notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 74.5 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.

24. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:

    a. The wells shall be located on the above described 74.5 acre overlying land area.

    b. The wells must be constructed to withdraw water from only the Arapahoe Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.

    c. The entire depth of each well must be geophysically logged prior to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

    d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.

    e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission upon their request.

    f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.

26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 74.5 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Dated this 20th day of May, 2008.

Dick Wolfe

Dick Wolfe, P.E
Executive Director
Colorado Ground Water Commission

By: Keith Vander Horst

Keith Vander Horst, P.E.
Water Resource Engineer

Prepared by: MAP

F&O1586-BD

GWS 1
03/2005

EXHIBIT A

1586-BD

Page 1 of 4

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St. Room 821
Denver, CO 80203
(303) 866-3581 Fax (303) 866-3589

RECEIVED
MAR 11 2008
WATER RESOURCES
STATE ENGINEER

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (We) Alice Jolene Owens
(Name(s))

claim and say that I (we) am (are) the owner(s) of the following described property consisting of 74.50 acres in the County of El Paso,
State of Colorado:

(Insert the property legal description)

TR IN W2NW4 SEC 13-11-64
(Refer to attachment)

and, that the ground water sought to be withdrawn from the Arapahoe aquifer underlying the above-described land has not been conveyed or reserved to another, nor has consent been given to its withdrawal by another.

Further, I (we) claim and say that I (we) have read the statements made herein; know the contents hereof; and that the same are true to my (our) knowledge.

Alice Jolene Owens 3/12/08
Signature Date

Signature Date

INSTRUCTIONS:
Please type or print neatly in black or blue ink. This form may be reproduced by photocopy or word processing means. See additional information on the reverse side.

ASSESSOR PROPERTY APPRAISAL INFORMATION
EL PASO COUNTY

Parcel No: 41000-00-306 **Master Parcel No:** 41000-00-136

Owner: OWENS ALICE J
PO BOX 322
PEYTON, CO 80831-0322

EXHIBIT A
1586-BD
Page 2 of 4

Location: RED BARN RD

Legal Description: TR IN W2NW4 SEC 13-11-64 DESC AS FOLS; COM AT NW COR OF SD SEC 13; TH S 89<02'04'' E 300.00 FT TO POB; TH S 00<39'33'' W 435.60 FT, N 89<02'04'' W 300.00 FT, S 00<39'33'' W 2202.71 FT TO W4 COR OF SD SEC 13, ELY ALG E/W C/L 1286.16 FT M/L TO SE COR OF SD W2NW4, NLY 2631.43 FT M/L ALG ELY LN OF SD W2NW4 TO NE COR THEREOF, TH WLY 977.34 FT M/L ALG N SEC LN TO POB

Txd	Levy	Neighborhood	Plat	Create Date
MBM	51.976	95	0	05/02/1996

	Use Code	Area	Assessed Value	Market Value	Appraisal Date
Land:	85	74.50AC	790	2741	3/07
Totals:			790	2741	

Sales:

Date	Sale Price	Doc Fee	Reception #	Sale Code	# Parcels
08/15/1996		0.00	96103570		0

Taxing Entities	Mill Rate
EL PASO COUNTY	7.514
PEYTON SCHOOL NO. 23	35.000
PIKES PEAK LIBRARY	3.325
PEYTON FIRE DISTRICT	6.137
KIOWA CONSERVATION DISTRICT	
2007 Tax Rate:	51.976 mills

Mark Lowderman
Assessor, El Paso County

Please note that appraisal records are subject to change without notification.

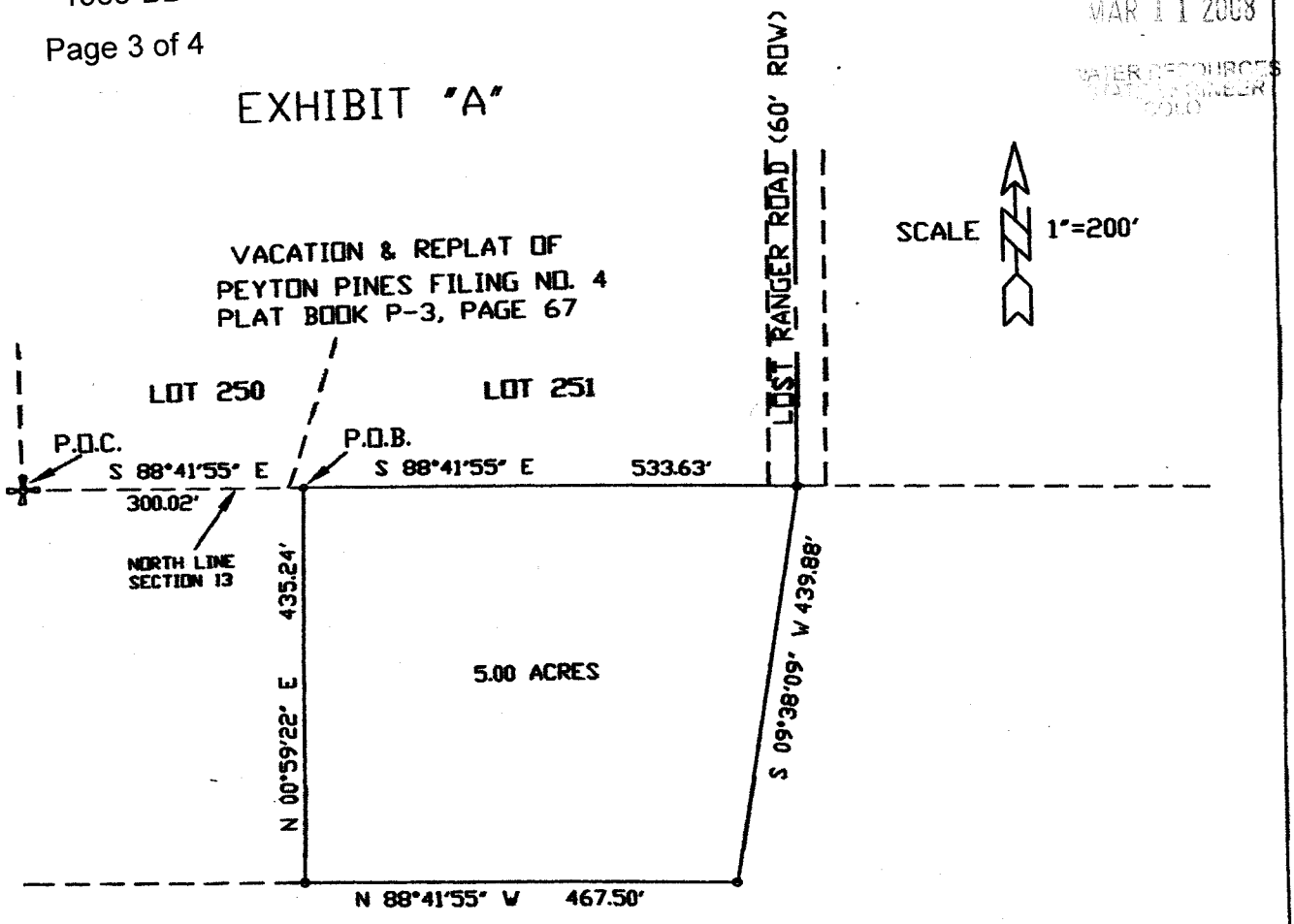
Printed: 04/01/2008 **By:** AMIDEI

This is a 5 acres parcel with an existing meter. This 5 acres is included in the 74.50 acreage amount.

EXHIBIT A

1586-BD

EXHIBIT "A"



UNITED
ENGINEERING
PLANNING

4575 GALLEY ROAD SUITE 200
COLORADO SPRINGS COLORADO
(719) 597-9900 80915

PROJECT	DATE	DRAWN
05-0102	1-26-05	J.L.K.

C:\Projects 2005\05-0102\05-0102.dwg

UNITED
PLANNING &
ENGINEERING

planners • consultants • engineers • landscape architects • surveyors

(719) 597-9900 FAX (719) 597-9905

EXHIBIT A

1586-BD

JANUARY 25, 2005

LEGAL DESCRIPTION:

A PORTION OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 11 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE S 88°41'55" E ALONG THE NORTH LINE OF SAID SECTION 13, 300.02 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID NORTH LINE, S 88°41'55" E, 533.63 FEET; THENCE S 09°38'09" W, 439.88 FEET; THENCE N 88°41'55" W PARALLEL TO SAID NORTH LINE, 467.50 FEET; THENCE N 00°59'22" E, 435.24 FEET TO THE POINT OF BEGINNING AND CONTAINING 5.000 ACRES MORE OR LESS. (SEE EXHIBIT "A")

COLORADO GROUND WATER COMMISSION
DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 Sherman St, Room 818, Denver, CO 80203

RECEIVED
MAR 11 2008
WATER RESOURCES
STATE ENGINEER
COLO

APPLICATION FOR DETERMINATION OF WATER RIGHT WITHIN A DESIGNATED GROUND WATER BASIN PURSUANT TO SECTION 37-90-107(7), C.R.S.

Please note: This application may only be used to apply for a determination of rights to ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer underlying land areas located within a Designated Ground Water Basin. Review the instructions on the reverse of this form. This form must be completed, signed, dated and submitted to the Ground Water Commission with a non-refundable $60 filing fee. A separate form must be used for each aquifer determination. Type or print in black ink.

1. APPLICANT INFORMATION

Name of Applicant
Alice Jolene Owens

Applicant Mailing Address
18430 Lost Ranger Rd. Peyton, Co. 80831

Applicant Telephone Number (include area code) 719-596-7947

2. AMOUNT OF OVERLYING LAND – the total land area claimed and described by the applicant in Item #8 below, consisting of 74.50 acres.

3. AQUIFER
Arapahoe

4. EXISTING WELLS – Are there any wells located on the claimed and described overlying land? Yes____ No____
If yes, provide a complete list of all wells located on the overlying land area as an attachment to this application.

5. ANNUAL AMOUNT OF GROUND WATER – to be withdrawn, for intended beneficial uses, from the aquifer underlying the described land area claimed by the applicant in Item #8 below. Please specify one of the following:

- [X] Maximum allowable annual acre-feet
- [ ] _____ acre-feet annually
- [ ] Maximum allowable annual acre-feet, excluding _____ acre-feet from that amount

6. USE OF GROUND WATER – description of intended beneficial uses of the ground water to be withdrawn from the aquifer
Domestic, stockwatering, irregation, commercial and replacement supply.

7. PLACE OF USE – of the ground water shall be considered to be that overlying land area claimed and described by the applicant in Item #8 below, unless a legal description or accurate scale map is provided which describes an alternate/additional place of use.

8. REQUIRED LANDOWNERSHIP DOCUMENTATION - The Ground Water Commission shall allocate ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer on the basis of ownership of overlying land. For this reason, a Nontributary Ground Water Landownership Statement (form GWS-1) or Nontributary Ground Water Consent Claim (form GWS-48), including a description of the overlying land area subject to this determination, must be submitted as an attachment to the application.

9. SIGNATURE OF APPLICANT - must be original signature – The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.

Signature Alice Jolene Owens Date 3/12/08

- print name and title Alice Jolene Owens Owner

FOR OFFICE USE ONLY

Trans Number: 3626753
3/11/2008 2:27:11 PM
James Martin (19)
Total Trans Amt: $60.00
CHECK
Check Number: 12972
Check Amount: $60.00

DIV 8 CO ____ WD 1 BASIN 2 MD ____

Form GWS-53 (6/2006)

DETERMINATION OF WATER RIGHT EVALUATION SHEET
SECTION 37-90-107(7)

APPLICANT: **Owens, Alice Jolene**

BASIN: Kiowa-Bijou GWMD: None

COUNTY: El Paso

AQUIFER: **Arapahoe** RECEIPT NO. 3626753

NUMBER OF ACRES IN TRACT: 74.5

GENERAL LOCATION: W1/2 of the NW1/4 of Section 13, T11S, R64W

AQUIFER DATA

AMOUNT AVAILABLE FOR APPROPRIATION: (230 SS)(74.5 Acres)(0.17 SY) = 2912.95 AF= 29.1 AFyr

ADJUSTMENTS: None

ANNUAL AMOUNT: **29.1 AFyr**

PRE.NOV.19, 1973 WELLS (COMPLETED IN AQUIFER) IN VICINITY:

AREA CHECKED: Sections 11, 12, 13, 14, 23, 24 in T11S, R64W
Sections 7, 18, 19 in T11S, R63W

SMALL-CAPACITY WELLS (COMPLETED IN AQUIFER) LOCATED ON CLAIMED TRACT: None

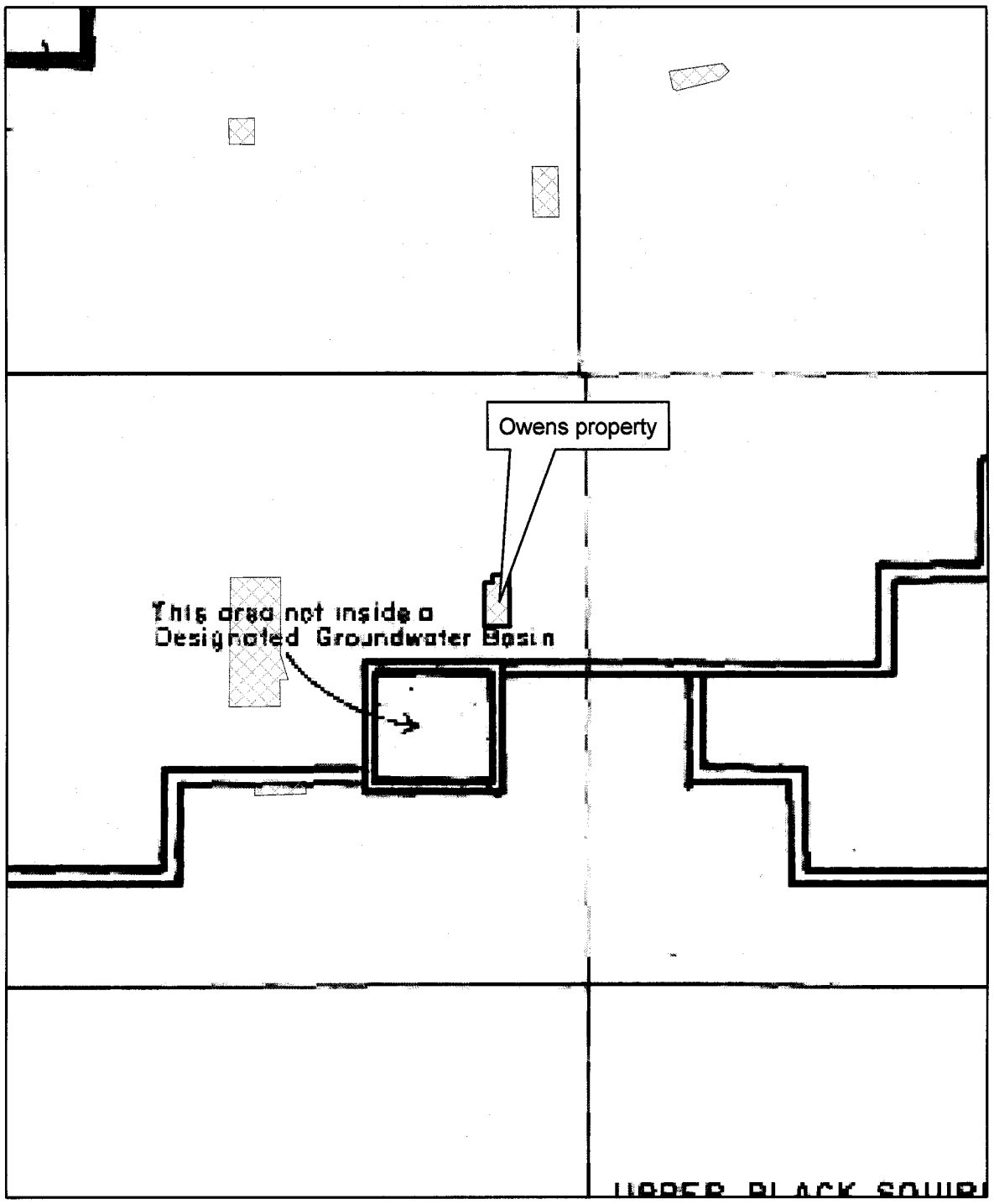
REPLACEMENT WATER STATUS OF CLAIMED LAND AREA: **Nontributary**

REPLACEMENT PLAN REQUIRED: No

AQUIFER INTERVAL (CENTRAL DATA POINT): 1740 to 2230 bgs

COMMENTS: The SS was considered to be 230 feet based on the SS map for the Arapahoe aquifer.

Evaluated by MAP, 3/26/2008
Reviewed by SKR, Ground Water Commission Staff



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

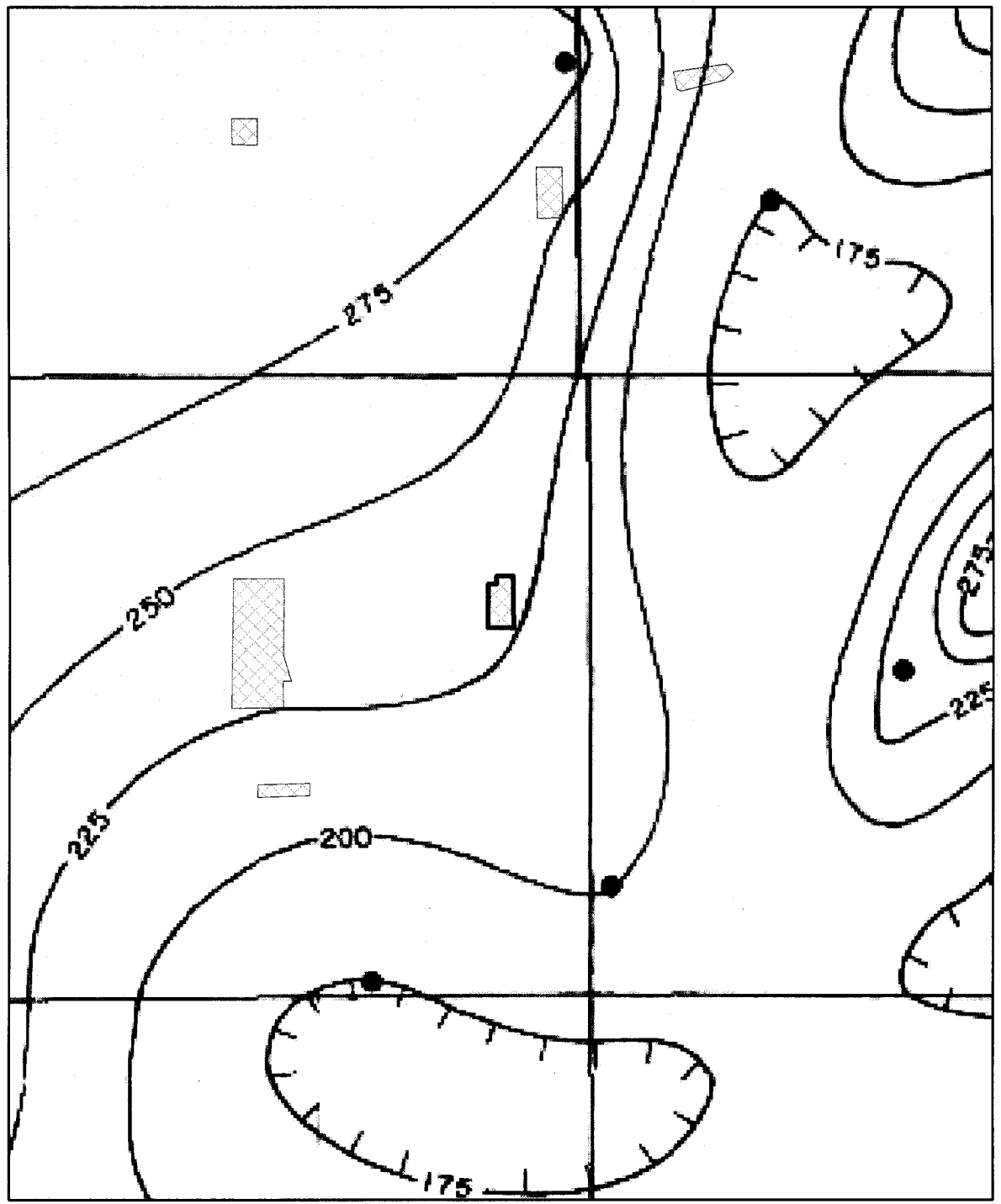
Tributary map
Arapahoe aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NT

N



COLORADO DIVISION OF
WATER RESOURCES

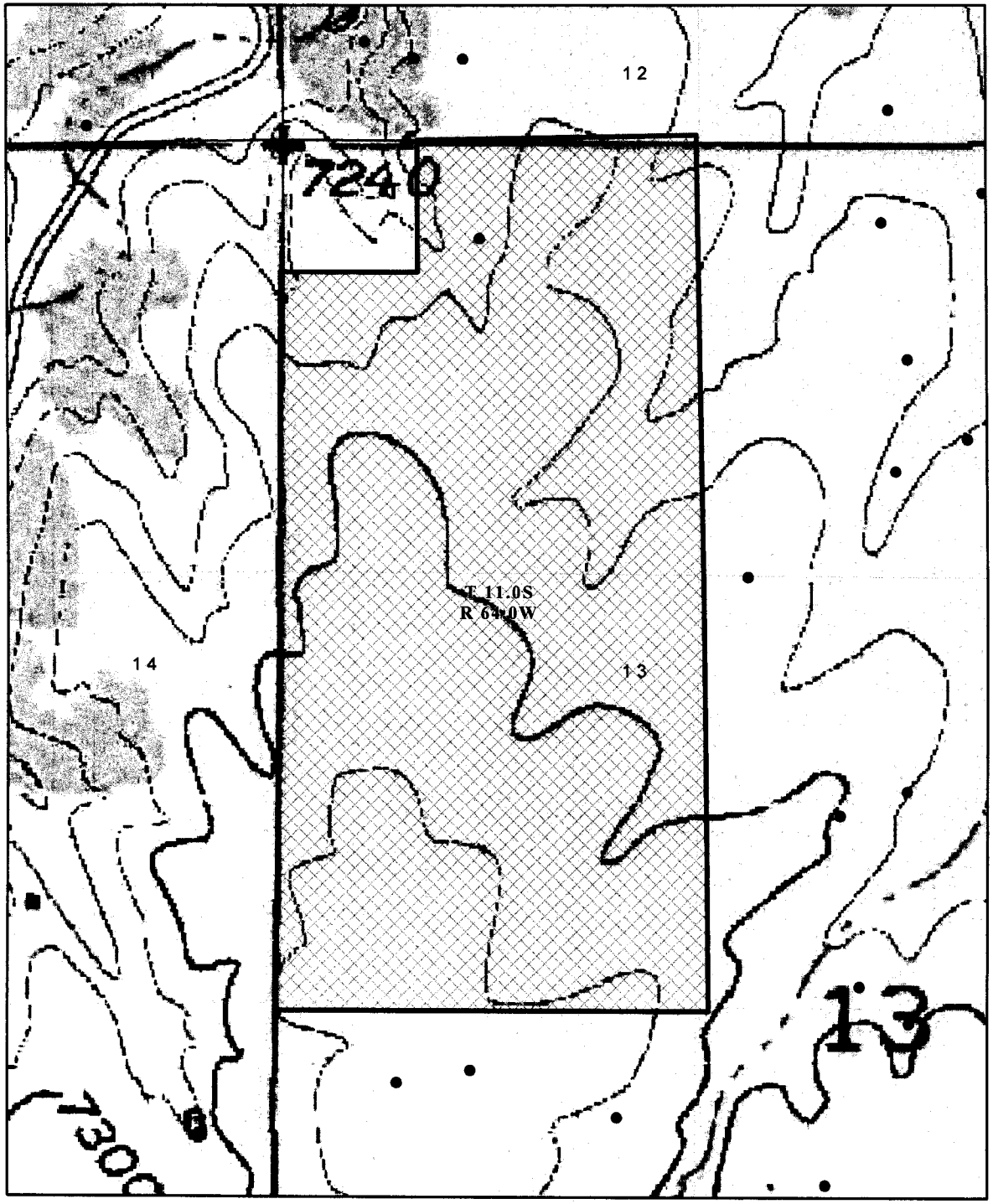
BASIN: Kiowa Bijou

Saturated Sands map
Arapahoe aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

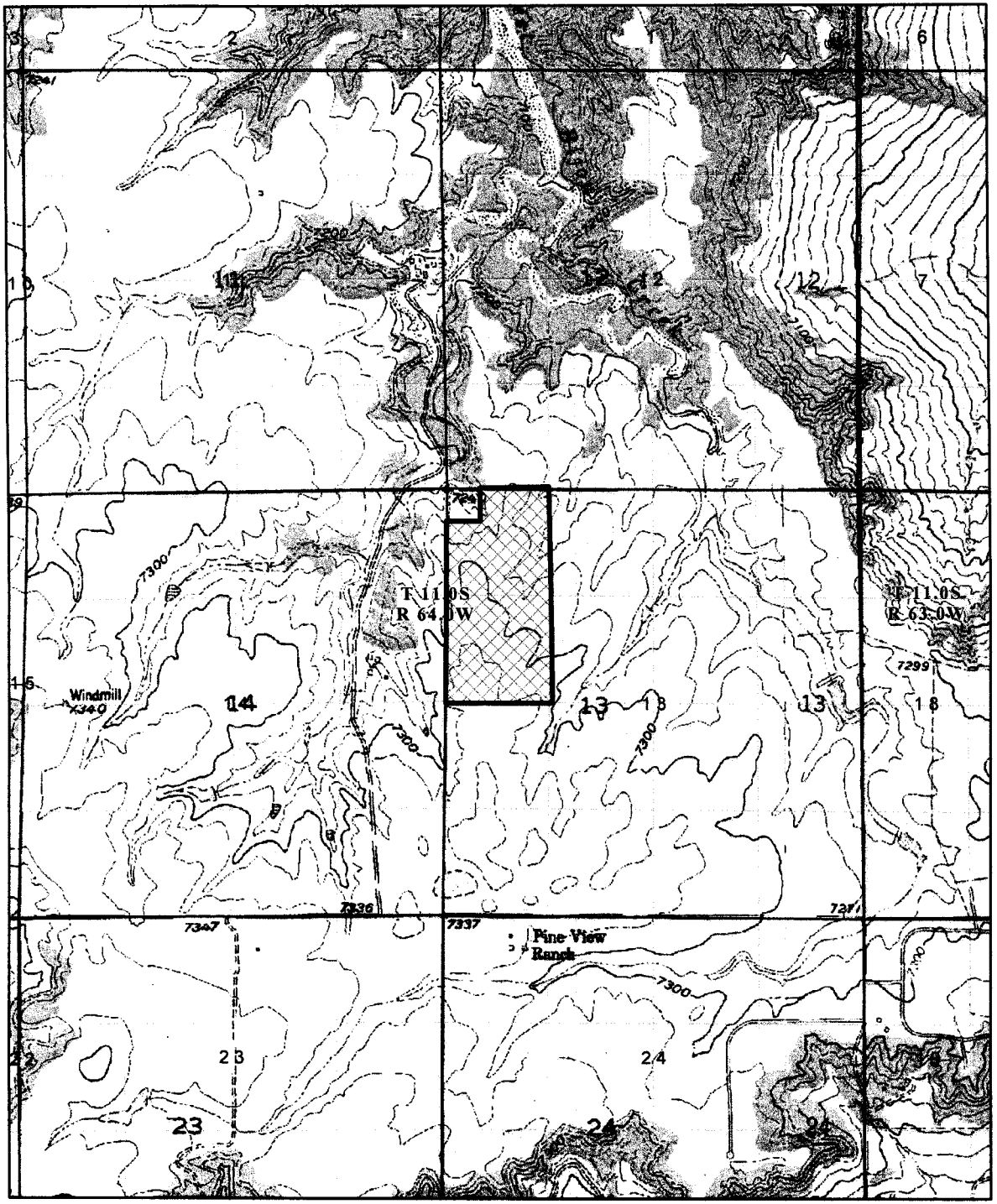
BASIN: Kiowa Bijou

Wells

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

Property Location

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

I, Susan Lister, do solemnly affirm that I am the Publisher of RANCHLAND NEWS; that the same is a weekly newspaper published at Simla, County of Elbert, State of Colorado, and has a general circulation therein; that said newspaper has been continuously and uninterruptedly published in said County of Elbert for a period of at least 52 consecutive weeks next prior to the first publication of the annexed notice, that said newspaper is entered in the post office at Calhan, Colorado as second class mail matter and that said newspaper is a newspaper within the meaning of the Act of the General Assembly of the State of Colorado, approved March 30, 1923, and entitled "Legal Notices and Advertisements," with other Acts relating to the printing and publishing of legal notices and advertisements. That the annexed notice was published in the regular and entire issue of said newspaper, once each week for two successive weeks; that the first publication of said notice was in the issue of said newspaper dated:

April 3, 2008

and the last publication of said notice was in the issue of said newspaper dated:

April 10, 2008

and that copies of each number of said paper in which said notice and/or list was published were delivered by carriers or transmitted by mail to each of the subscribers of said newspaper, Ranchland News, according to the accustomed mode of business in this office.

Susan Lister
Publisher

The above certificate of publication was subscribed and affirmed to before me, a Notary Public, to be the identical person described in the above certificate, on the

10 day of April, 2008

Notary Public

1/22/12
(My Notary Public Commission Expiration Date)

Determinations of Water Right

BEFORE THE COLORADO GROUND WATER COMMISSION

KIOWA BIJOU DESIGNATED GROUND WATER BASIN– EL PASO COUNTY

TAKE NOTICE that pursuant to Section 37-90-107(7), C.R.S., Alice J. Owens (hereinafter "applicant") has applied for determinations of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills, Arapahoe, Denver and Dawson aquifers underlying 74.5 acres generally described as W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th P.M. The applicant claims ownership of this land and control of the ground water in the above-described aquifers under this property. The ground water allocations from these aquifers will be used on the described property for the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The maximum allowable annual amount of ground water in each aquifer underlying the described property will be allocated.

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, the Colorado Ground Water Commission shall allocate ground water from the above-described aquifers based on ownership of the overlying land and an aquifer life of one hundred years. A preliminary evaluation of the applications by the Commission Staff finds the annual amount of water available for allocation from each of the described aquifers underlying the above-described property to be as follows: 24.6 acre-feet for the Laramie-Fox Hills, 29.1 acre-feet for the Arapahoe, 38.0 acre-feet for the Denver, and 18.6 acre-feet for the Dawson, subject to final staff evaluation. The estimated available annual acre-feet allocation amount for each aquifer indicated above may be increased or decreased by the Commission to conform to the actual aquifer characteristics, based upon site specific data. The amount for the Dawson aquifer represents a reduction in the initial annual amount determined to be available to allow for the annual withdrawal of a small-capacity well located on the described property area, permit no. 260301.

In accordance with Rule 5.3.6 of the Designated Basin Rules, the Commission Staff's preliminary evaluation of the applications finds the replacement water requirement status for the above aquifers underlying the above-described property to be as follows: nontributary for the Laramie-Fox Hills, nontributary for the Arapahoe, nontributary for the Denver, and not-nontributary (actual impact replacement) for the Dawson.

Upon Commission approval of these determinations of water right, well permits for wells to withdraw the allowed allocation from a specific aquifer shall be available upon application, subject to the conditions of the determination and the Designated Basin Rules and subject to approval by the Commission. Such wells must be completed in the specified aquifer and located on the above described 74.5 acre property.

Any person wishing to object to the approval of these determinations of water right must do so in writing, briefly stating the nature of the objection and indicating the above applicant, property description and the specific aquifers that are the subject of the objection. The objection must be accompanied by a $10 fee and must be received by the Commission Staff, Colorado Ground Water Commission, 818 Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, by May 12, 2008.

First Publication April 3, 2008
Final Publication April 10, 2008
In Ranchland News
Legal No. 12,842

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

May 20, 2008

Alice Jolene Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Determination of Water Right

Dear Ms. Owens:

Enclosed are 2 copies of the Colorado Ground Water Commission's Findings and Order for Determination of Water Right No. **1586-BD**, for the allocation of ground water in the **Arapahoe** aquifer. This Findings and Order is the Commission's approval of your application for determination of rights to ground water in the above stated aquifer. This document contains important information about your water right and should be reviewed and retained for your records.

As indicated in the Order, a copy of this determination must be recorded by the applicant in the public records of the county – in which the overlying land is located – so that a title examination of the overlying land claimed in the application, or any part thereof, shall reveal this determination. An additional copy of the Findings and Order is enclosed for this purpose.

If you have any questions, please contact this office.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resources Engineer
Designated Basins Team

enclosures: a/s

COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE KIOWA BIJOU DESIGNATED GROUND WATER BASIN

APPLICANT: ALICE JOLENE OWENS

AQUIFER: DENVER

DETERMINATION NO.: **1587-BD**

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Alice Jolene Owens (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Denver Aquifer.

FINDINGS

1. The application was received complete by the Colorado Ground Water Commission on March 11, 2008.

2. The applicant requests a determination of rights to designated ground water in the Denver Aquifer (hereinafter "aquifer") underlying 74.5 acres, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated March 12, 2008, the applicant owns the 74.5 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.

3. The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.

4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Kiowa Bijou Designated Ground Water Basin. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.

5. The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The applicant's proposed place of use of the allocated ground water is the above described 74.5 acre land area.

6. The quantity of water in the aquifer underlying the 74.5 acres of land claimed by the applicant is 3800 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:

   a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 300 feet.

7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.

8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 74.5 acres of overlying land claimed by the applicant is 38.0 acre-feet.

9. A review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.

10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.

11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will not, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. No more than 98% of the amount of ground water withdrawn annually shall be consumed, as required by the Designated Basin Rules.

13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.

14. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

15. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on April 3 and April 10, 2008.

16. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.

17. In order to prevent unreasonable impairment to the existing water rights of others within the Kiowa Bijou Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Denver Aquifer underlying 74.5 acres of land, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, is approved subject to the following conditions:

18. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 38.0 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.

19. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.

20. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.

21. No more than 98% of the ground water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the water withdrawn is being consumed.

22. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The place of use shall be limited to the above described 74.5 acre land area.

23. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county - in which the claimed overlying land is located - notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 74.5 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.

24. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:

    a. The wells shall be located on the above described 74.5 acre overlying land area.

    b. The wells must be constructed to withdraw water from only the Denver Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.

    c. The entire depth of each well must be geophysically logged prior to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

    d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.

    e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission upon their request.

    f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.

26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 74.5 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Dated this 20th day of May, 2008.

Dick Wolfe, P.E
Executive Director
Colorado Ground Water Commission

By: Keith Vander Horst
Keith Vander Horst, P.E.
Water Resource Engineer

Prepared by: MAP

F&O1587-BD

RECEIVED

MAR 11 2009

WATER RESOURCES
STATE ENGINEER
COLO

GWS 1
03/2005

EXHIBIT A

1587-BD

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St. Room 821
Denver, CO 80203
(303) 866-3581 Fax (303) 866-3589

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (We) Alice Jolene Owens
(Name(s))

claim and say that I (we) am (are) the owner(s) of the following described property consisting of 74.50 acres in the County of El Paso, State of Colorado:

(Insert the property legal description)

TR IN W2 NW4 SEC 13-11-64
(Refer to attachment)

and, that the ground water sought to be withdrawn from the Denver aquifer underlying the above-described land has not been conveyed or reserved to another, nor has consent been given to its withdrawal by another.

Further, I (we) claim and say that I (we) have read the statements made herein; know the contents hereof; and that the same are true to my (our) knowledge.

Alice Jolene Owens 3/12/08
Signature Date

Signature Date

INSTRUCTIONS:
Please type or print neatly in black or blue ink. This form may be reproduced by photocopy or word processing means. See additional information on the reverse side.

ASSESSOR PROPERTY APPRAISAL INFORMATION
EL PASO COUNTY

Parcel No: 41000-00-306 **Master Parcel No:** 41000-00-136

Owner: OWENS ALICE J
PO BOX 322
PEYTON, CO 80831-0322

EXHIBIT A
1587-BD
Page 2 of 4

Location: RED BARN RD

Legal Description: TR IN W2NW4 SEC 13-11-64 DESC AS FOLS; COM AT NW COR OF SD SEC 13; TH S 89<02'04'' E 300.00 FT TO POB; TH S 00<39'33'' W 435.60 FT, N 89<02'04'' W 300.00 FT, S 00<39'33'' W 2202.71 FT TO W4 COR OF SD SEC 13, ELY ALG E/W C/L 1286.16 FT M/L TO SE COR OF SD W2NW4, NLY 2631.43 FT M/L ALG ELY LN OF SD W2NW4 TO NE COR THEREOF, TH WLY 977.34 FT M/L ALG N SEC LN TO POB

Txd	Levy	Neighborhood	Plat	Create Date
MBM	51.976	95	0	05/02/1996

	Use Code	Area	Assessed Value	Market Value	Appraisal Date
Land:	85	74.50AC	790	2741	3/07
Totals:			790	2741	

Sales:	Date	Sale Price	Doc Fee	Reception #	Sale Code	# Parcels
	08/15/1996		0.00	96103570		0

Taxing Entities	Mill Rate
EL PASO COUNTY	7.514
PEYTON SCHOOL NO. 23	35.000
PIKES PEAK LIBRARY	3.325
PEYTON FIRE DISTRICT	6.137
KIOWA CONSERVATION DISTRICT	
2007 Tax Rate:	51.976 mills

Mark Lowderman
Assessor, El Paso County

Please note that appraisal records are subject to change without notification.

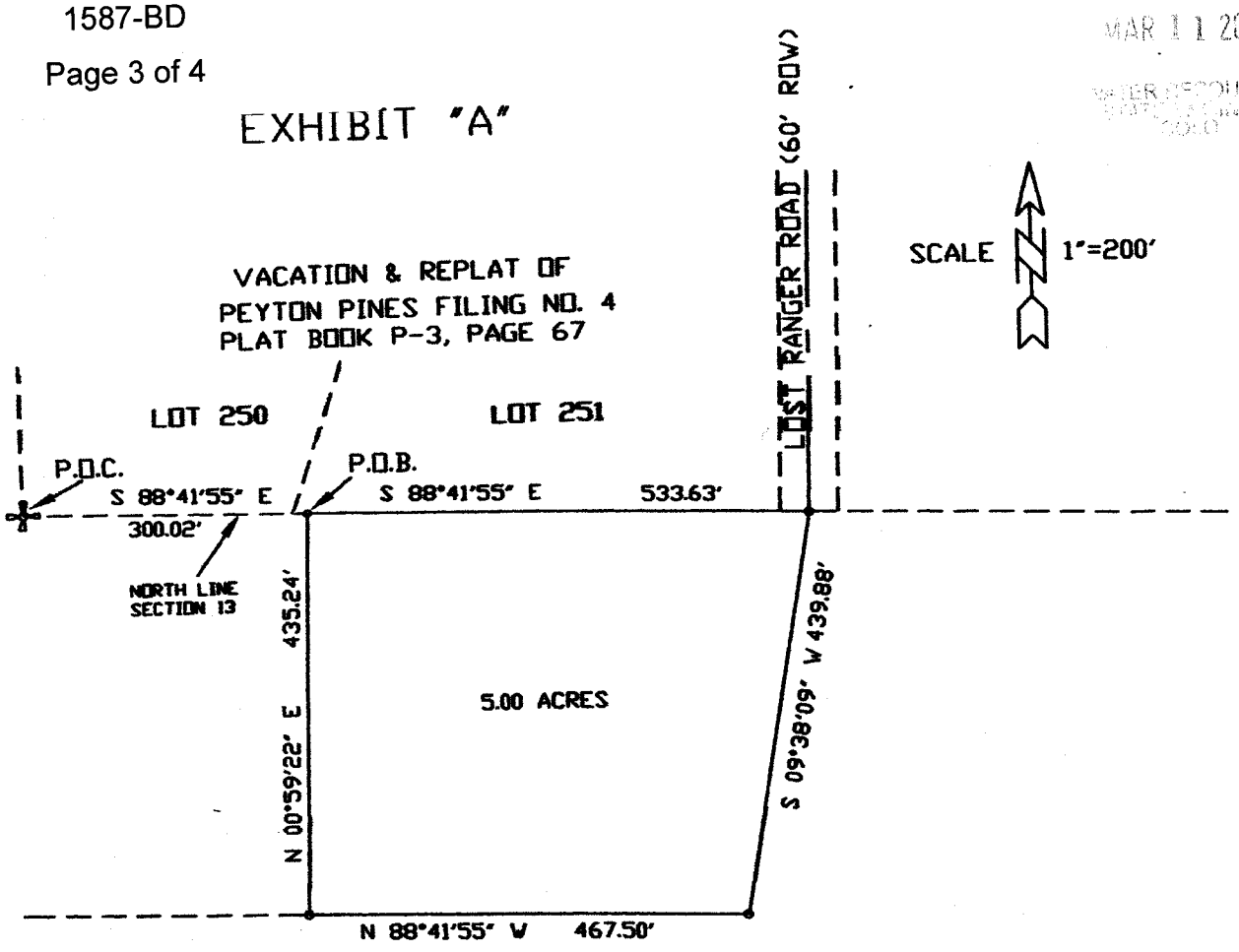
Printed: 04/01/2008 **By:** AMIDEI

This is a 5 acre parcel with an existing well. This 5 acres is included in the 74.50 acreage amount.

EXHIBIT A

1587-BD

EXHIBIT "A"



UNITED
ENGINEERING
PLANNING

4575 GALLEY ROAD SUITE 200
COLORADO SPRINGS COLORADO
(719) 597-9900 80915

PROJECT	DATE	DRAWN
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C:\Projects 2005\05-0102\05-0102.dwg

UNITED
PLANNING &
ENGINEERING

planners • consultants • engineers • landscape architects • surveyors

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EXHIBIT A

1587-BD

JANUARY 25, 2005

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34

34

COLORADO GROUND WATER COMMISSION
DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 Sherman St, Room 818, Denver, CO 80203

RECEIVED

MAR 11 2008

WATER RESOURCES
STATE ENGINEER
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Name of Applicant: Alice Jolene Owens

Applicant Mailing Address: 18430 Lost Ranger Rd. Peyton, Co. 80831

Applicant Telephone Number (include area code): 719-596-7447

2. AMOUNT OF OVERLYING LAND – the total land area claimed and described by the applicant in Item #8 below, consisting of 74.50 acres.

3. AQUIFER: Denver

4. EXISTING WELLS – Are there any wells located on the claimed and described overlying land? Yes____ No____
If yes, provide a complete list of all wells located on the overlying land area as an attachment to this application.

5. ANNUAL AMOUNT OF GROUND WATER – to be withdrawn, for intended beneficial uses, from the aquifer underlying the described land area claimed by the applicant in Item #8 below. Please specify one of the following:

☒ Maximum allowable annual acre-feet ☐ _____ acre-feet annually ☐ Maximum allowable annual acre-feet, excluding _____ acre-feet from that amount

6. USE OF GROUND WATER – description of intended beneficial uses of the ground water to be withdrawn from the aquifer

Domestic, stockwatering, irregation, commercial and replacement supply

7. PLACE OF USE – of the ground water shall be considered to be that overlying land area claimed and described by the applicant in Item #8 below, unless a legal description or accurate scale map is provided which describes an alternate/additional place of use.

8. REQUIRED LANDOWNERSHIP DOCUMENTATION - The Ground Water Commission shall allocate ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer on the basis of ownership of overlying land. For this reason, a Nontributary Ground Water Landownership Statement (form GWS-1) or Nontributary Ground Water Consent Claim (form GWS-48), including a description of the overlying land area subject to this determination, must be submitted as an attachment to the application.

9. SIGNATURE OF APPLICANT - must be original signature – The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.

Signature: Alice Jolene Owens Date: 3/12/08

- print name and title: Alice Jolene Owens Owner

FOR OFFICE USE ONLY

Trans Number: 3026757
3/11/2008 2:31:28 PM
James Martin (19)
Total Trans Amt: $60.00
CHECK
Check Number: 12971
Check Amount: $60.00

DIV 8 CO WD 1 BASIN 2 MD

Form GWS-53 (6/2006)

DETERMINATION OF WATER RIGHT EVALUATION SHEET
SECTION 37-90-107(7)

APPLICANT: **Owens, Alice Jolene**

BASIN: Kiowa-Bijou GWMD: None

COUNTY: El Paso

AQUIFER: **Denver** RECEIPT NO. 3626757

NUMBER OF ACRES IN TRACT: 74.5

GENERAL LOCATION: W1/2 of the NW1/4 of Section 13, T11S, R64W

AQUIFER DATA

AMOUNT AVAILABLE FOR APPROPRIATION: (300 SS)(74.5 Acres)(0.17 SY) = 3799.5 AF = 38.0 AFyr

ADJUSTMENTS: None

ANNUAL AMOUNT: **38.0 AFyr**

PRE.NOV.19, 1973 WELLS (COMPLETED IN AQUIFER) IN VICINITY:

AREA CHECKED: Sections 11, 12, 13, 14, 23, 24 in T11S, R64W
Sections 7, 18, 19 in T11S, R63W

SMALL-CAPACITY WELLS (COMPLETED IN AQUIFER) LOCATED ON CLAIMED TRACT: None

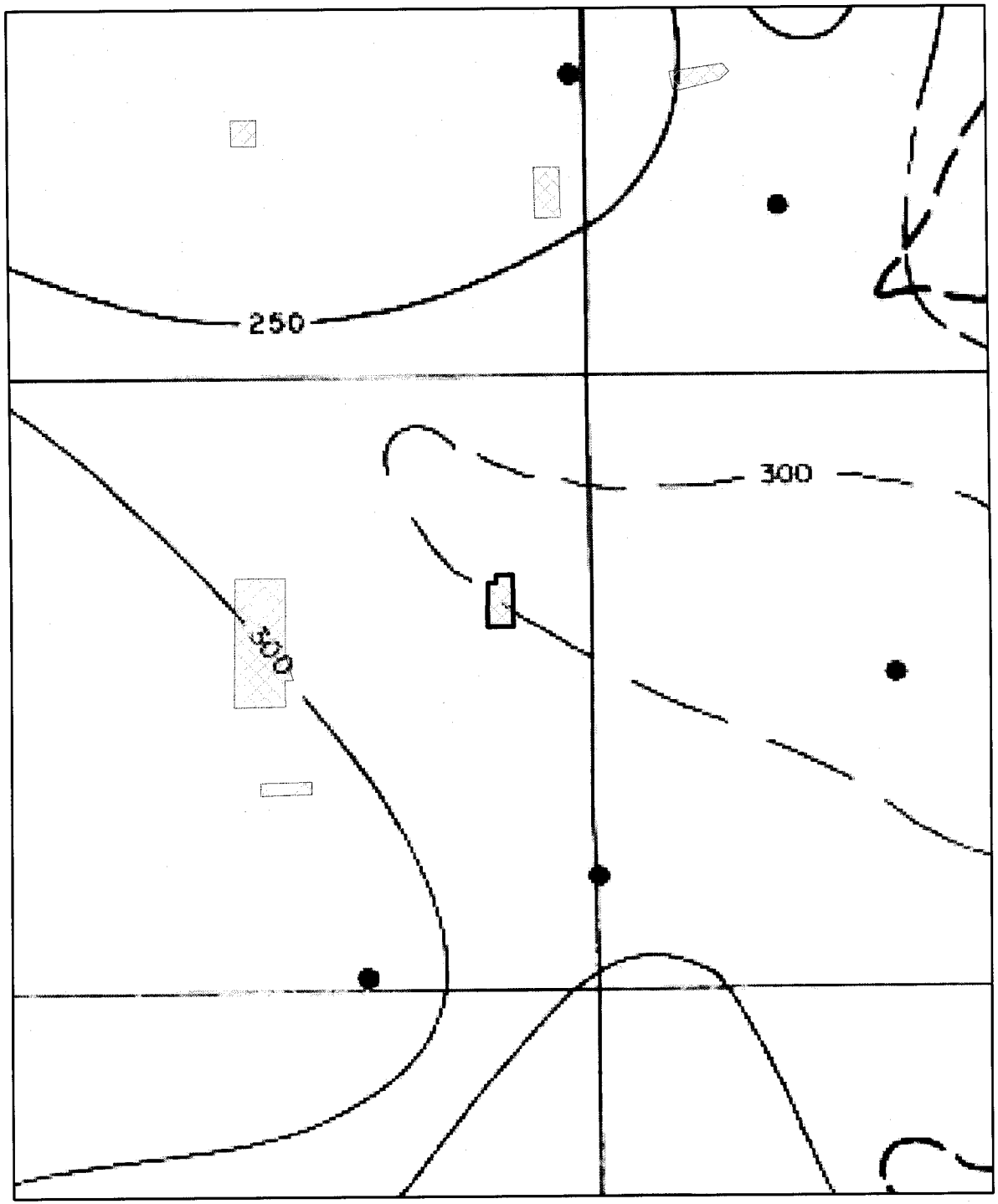
REPLACEMENT WATER STATUS OF CLAIMED LAND AREA: **Nontributary**

REPLACEMENT PLAN REQUIRED: No

AQUIFER INTERVAL (CENTRAL DATA POINT): 850 to 1690 bgs

COMMENTS: The SS was considered to be 230 feet based on the SS map for the Denver aquifer.

Evaluated by MAP, 3/26/2008
Reviewed by SKR, Ground Water Commission Staff



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

Saturated Sands map
Denver aquifer

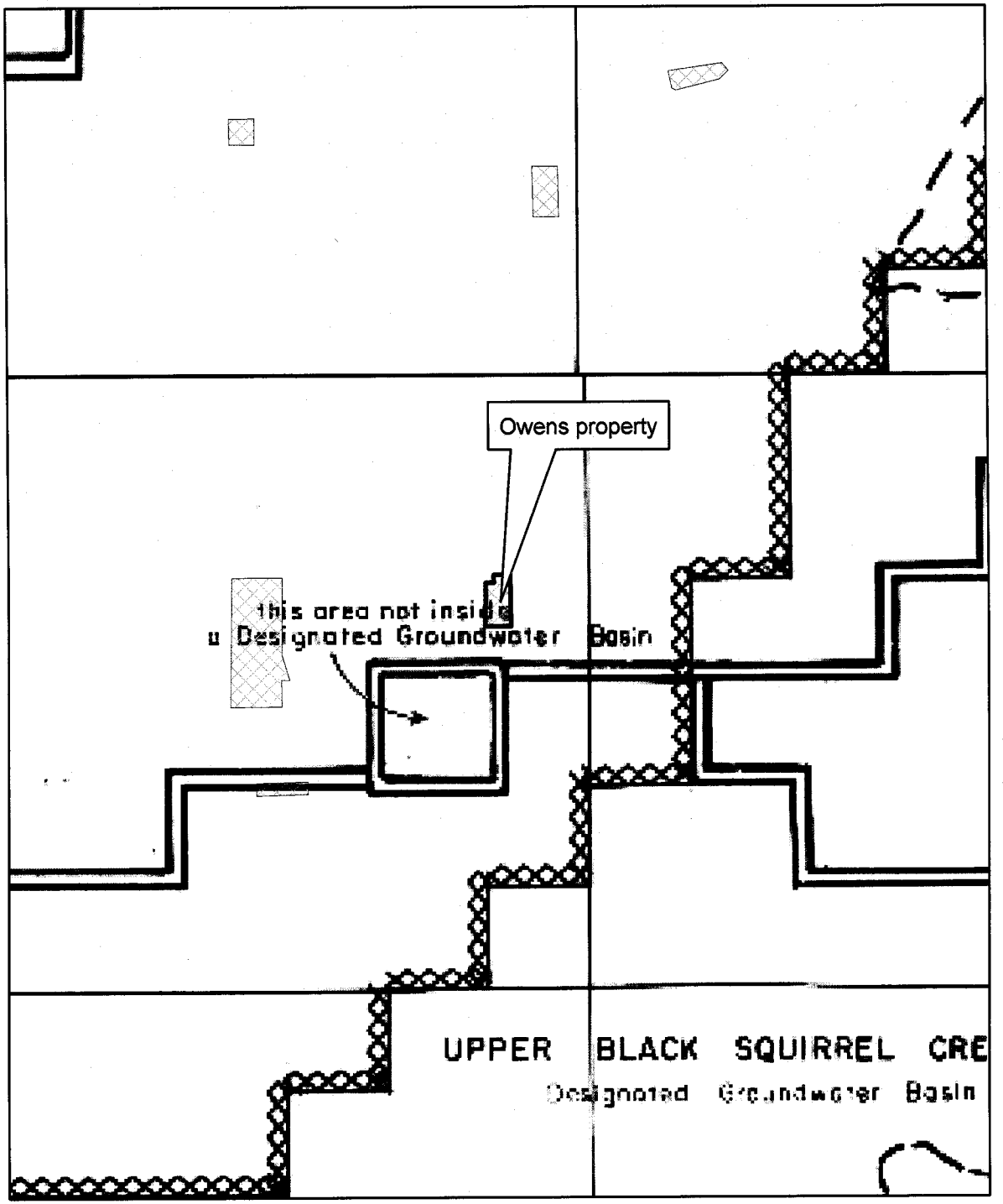
Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NNT AIR

N

COLORADO DIVISION OF WATER RESOURCES



BASIN: Kiowa Bijou

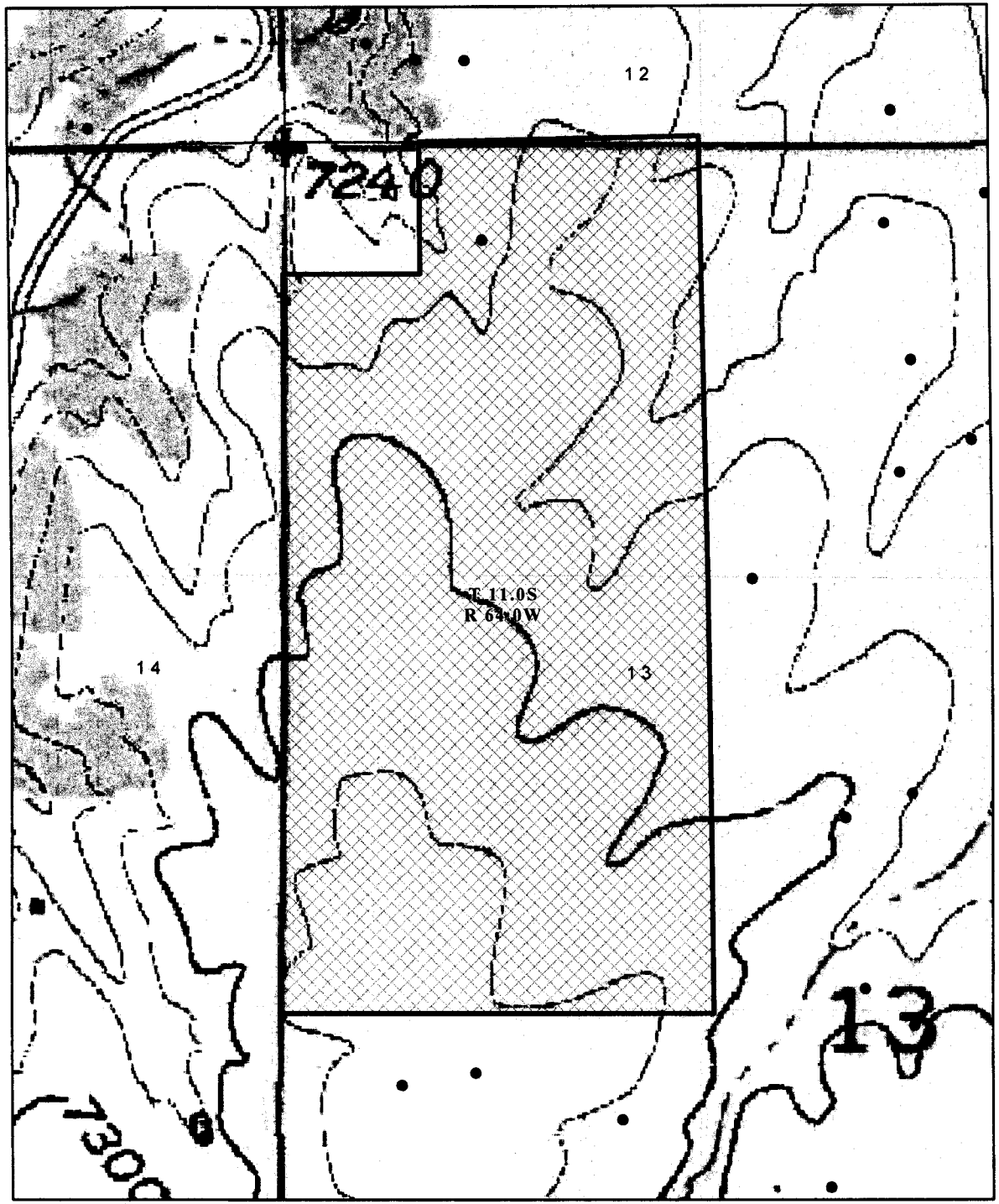
Tributary map
Denver aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NT

N



COLORADO DIVISION OF WATER RESOURCES

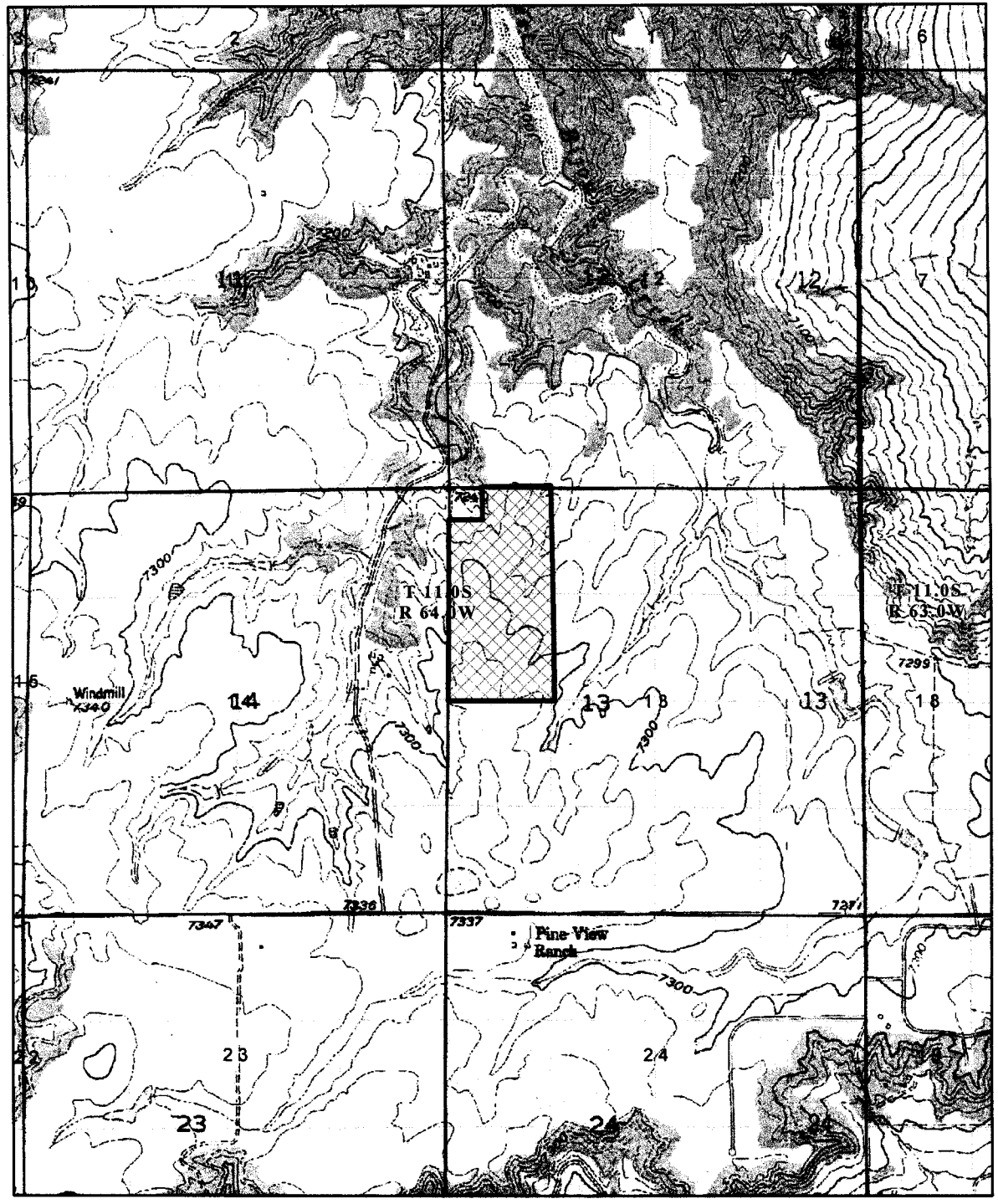
BASIN: Kiowa Bijou

Wells

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

Property Location

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

I, Susan Lister, do solemnly affirm that I am the Publisher of RANCHLAND NEWS; that the same is a weekly newspaper published at Simla, County of Elbert, State of Colorado, and has a general circulation therein; that said newspaper has been continuously and uninterruptedly published in said County of Elbert for a period of at least 52 consecutive weeks next prior to the first publication of the annexed notice, that said newspaper is entered in the post office at Calhan, Colorado as second class mail matter and that said newspaper is a newspaper within the meaning of the Act of the General Assembly of the State of Colorado, approved March 30, 1923, and entitled "Legal Notices and Advertisements," with other Acts relating to the printing and publishing of legal notices and advertisements. That the annexed notice was published in the regular and entire issue of said newspaper, once each week for two successive weeks; that the first publication of said notice was in the issue of said newspaper dated:

April 3, 2008

and the last publication of said notice was in the issue of said newspaper dated:

April 10, 2008

and that copies of each number of said paper in which said notice and/or list was published were delivered by carriers or transmitted by mail to each of the subscribers of said newspaper, Ranchland News, according to the accustomed mode of business in this office.

Susan Lister
Publisher

The above certificate of publication was subscribed and affirmed to before me, a Notary Public, to be the identical person described in the above certificate, on the

10 day of April, 2008

Notary Public

1/22/12
(My Notary Public Commission Expiration Date)

Determinations of Water Right

BEFORE THE COLORADO GROUND WATER COMMISSION

KIOWA BIJOU DESIGNATED GROUND WATER BASIN- EL PASO COUNTY

TAKE NOTICE that pursuant to Section 37-90-107(7), C.R.S., Alice J. Owens (hereinafter "applicant") has applied for determinations of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills, Arapahoe, Denver and Dawson aquifers underlying 74.5 acres generally described as W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th P.M. The applicant claims ownership of this land and control of the ground water in the above-described aquifers under this property. The ground water allocations from these aquifers will be used on the described property for the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The maximum allowable annual amount of ground water in each aquifer underlying the described property will be allocated.

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, the Colorado Ground Water Commission shall allocate ground water from the above-described aquifers based on ownership of the overlying land and an aquifer life of one hundred years. A preliminary evaluation of the applications by the Commission Staff finds the annual amount of water available for allocation from each of the described aquifers underlying the above-described property to be as follows: 24.6 acre-feet for the Laramie-Fox Hills, 29.1 acre-feet for the Arapahoe, 38.0 acre-feet for the Denver, and 18.6 acre-feet for the Dawson, subject to final staff evaluation. The estimated available annual acre-feet allocation amount for each aquifer indicated above may be increased or decreased by the Commission to conform to the actual aquifer characteristics, based upon site specific data. The amount for the Dawson aquifer represents a reduction in the initial annual amount determined to be available to allow for the annual withdrawal of a small-capacity well located on the described property area, permit no. 260301.

In accordance with Rule 5.3.6 of the Designated Basin Rules, the Commission Staff's preliminary evaluation of the applications finds the replacement water requirement status for the above aquifers underlying the above-described property to be as follows: nontributary for the Laramie-Fox Hills, nontributary for the Arapahoe, nontributary for the Denver, and not-nontributary (actual impact replacement) for the Dawson.

Upon Commission approval of these determinations of water right, well permits for wells to withdraw the allowed allocation from a specific aquifer shall be available upon application, subject to the conditions of the determination and the Designated Basin Rules and subject to approval by the Commission. Such wells must be completed in the specified aquifer and located on the above described 74.5 acre property.

Any person wishing to object to the approval of these determinations of water right must do so in writing, briefly stating the nature of the objection and indicating the above applicant, property description and the specific aquifers that are the subject of the objection. The objection must be accompanied by a $10 fee and must be received by the Commission Staff, Colorado Ground Water Commission, 818 Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, by May 12, 2008.

First Publication April 3, 2008
Final Publication April 10, 2008
In Ranchland News
Legal No. 12,842

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

May 20, 2008

Alice Jolene Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Determination of Water Right

Dear Ms. Owens:

Enclosed are 2 copies of the Colorado Ground Water Commission's Findings and Order for Determination of Water Right No. **1587-BD**, for the allocation of ground water in the **Denver** aquifer. This Findings and Order is the Commission's approval of your application for determination of rights to ground water in the above stated aquifer. This document contains important information about your water right and should be reviewed and retained for your records.

As indicated in the Order, a copy of this determination must be recorded by the applicant in the public records of the county – in which the overlying land is located – so that a title examination of the overlying land claimed in the application, or any part thereof, shall reveal this determination. An additional copy of the Findings and Order is enclosed for this purpose.

If you have any questions, please contact this office.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resources Engineer
Designated Basins Team

enclosures: a/s

COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE KIOWA BIJOU DESIGNATED GROUND WATER BASIN

APPLICANT: ALICE JOLENE OWENS

AQUIFER: DAWSON

DETERMINATION NO.: **1588-BD**

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Alice Jolene Owens (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Dawson Aquifer.

FINDINGS

1. The application was received complete by the Colorado Ground Water Commission on March 11, 2008.

2. The applicant requests a determination of rights to designated ground water in the Dawson Aquifer (hereinafter "aquifer") underlying 74.5 acres, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated March 12, 2008, the applicant owns the 74.5 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.

3. The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.

4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Kiowa Bijou Designated Ground Water Basin. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.

5. The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The applicant's proposed place of use of the allocated ground water is the above described 74.5 acre land area.

6. The quantity of water in the aquifer underlying the 74.5 acres of land claimed by the applicant is 2235 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:

   a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 20 percent.

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 150 feet.

7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.

8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 74.5 acres of overlying land claimed by the applicant is 22.4 acre-feet.

9. In accordance with Rule 5.3.2.4 of the Designated Basin Rules, the maximum average annual amount of ground water available for allocation from the aquifer underlying the 74.5 acres of land claimed by the applicant is reduced to 19.4 acre-feet to allow for the annual withdrawal of a small capacity well which is completed in the aquifer, permit number 260301. Except for this well, review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.

10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.

11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is considered to be not-nontributary ground water. Withdrawal of water from the aquifer underlying the claimed land area would impact the alluvial aquifer of Bijou Creek or its tributaries, which has been determined to be over-appropriated. Commission approval of a replacement plan - pursuant to Section 37-90-107.5, C.R.S., and Rule 5.6 of the Designated Basin Rules - providing for the actual depletion of the alluvial aquifer and adequate to prevent any material injury to existing water rights, would be required prior to approval of well permits for wells to be located on this land area to withdraw the allocated ground water from the aquifer.

13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.

14. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

15. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on April 3 and April 10, 2008.

16. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.

17. In order to prevent unreasonable impairment to the existing water rights of others within the Kiowa Bijou Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Dawson Aquifer underlying 74.5 acres of land, generally described as part of the W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th Principal Meridian, is approved subject to the following conditions:

18. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 19.4 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.

19. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.

20. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.

21. Commission approval of a replacement plan, providing for actual depletion of affected alluvial aquifers and adequate to prevent any material injury to existing water rights in such alluvial aquifers is required prior to approval of well permits for wells to be located on the overlying land area to withdraw ground water from the aquifer.

22. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The place of use shall be limited to the above described 74.5 acre land area.

23. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county - in which the claimed overlying land is located - notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 74.5 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.

24. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:

    a. The wells shall be located on the above described 74.5 acre overlying land area.

    b. The wells must be constructed to withdraw water from only the Dawson Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.

    c. The entire depth of each well must be geophysically logged prior to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

    d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.

    e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission upon their request.

    f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.

26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 74.5 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Dated this 20th day of May, 2008.

Dick Wolfe

Dick Wolfe, P.E
Executive Director
Colorado Ground Water Commission

By: Keith Vanderhorst

Keith Vander Horst, P.E.
Water Resource Engineer

Prepared by: MAP

F&O1588-BD

GWS 1
03/2005

EXHIBIT A

1588-BD

Page 1 of 4

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St. Room 821
Denver, CO 80203
(303) 866-3581 Fax (303) 866-3589

RECEIVED

MAR 1 1 2008

WATER RESOURCES
STATE ENGINEER
COLO

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (We) Alice Jolene Owens
(Name(s))

claim and say that (I) (we) am (are) the owner(s) of the following described property consisting of 74.50 acres in the County of El Paso, State of Colorado:

(Insert the property legal description) TR IN W2NW4 SEC 13-11-64 (Refer to attachment)

and, that the ground water sought to be withdrawn from the Dawson aquifer underlying the above-described land has not been conveyed or reserved to another, nor has consent been given to its withdrawal by another.

Further, I (we) claim and say that I (we) have read the statements made herein; know the contents hereof; and that the same are true to my (our) knowledge.

Alice Jolene Owens 3/12/08
Signature Date

Signature Date

INSTRUCTIONS:
Please type or print neatly in black or blue ink. This form may be reproduced by photocopy or word processing means. See additional information on the reverse side.

ASSESSOR PROPERTY APPRAISAL INFORMATION
EL PASO COUNTY

Parcel No: 41000-00-306 **Master Parcel No:** 41000-00-176

Owner: OWENS ALICE J
PO BOX 322
PEYTON, CO 80831-0322

EXHIBIT A
1588-BD
Page 2 of 4

Location: RED BARN RD

Legal Description: TR IN W2NW4 SEC 13-11-64 DESC AS FOLS; COM AT NW COR OF SD SEC 13; TH S 89<02'04'' E 300.00 FT TO POB; TH S 00<39'33'' W 435.60 FT, N 89<02'04'' W 300.00 FT, S 00<39'33'' W 2202.71 FT TO W4 COR OF SD SEC 13, ELY ALG E/W C/L 1286.16 FT M/L TO SE COR OF SD W2NW4, NLY 2631.43 FT M/L ALG ELY LN OF SD W2NW4 TO NE COR THEREOF, TH WLY 977.34 FT M/L ALG N SEC LN TO POB

Txd	Levy	Neighborhood	Plat	Create Date
MBM	51.976	95	0	05/02/1996

	Use Code	Area	Assessed Value	Market Value	Appraisal Date
Land:	85	74.50AC	790	2741	3/07
Totals:			790	2741	

Sales: Date	Sale Price	Doc Fee	Reception #	Sale Code	# Parcels
08/15/1996		0.00	96103570		0

Taxing Entities	Mill Rate
EL PASO COUNTY	7.514
PEYTON SCHOOL NO. 23	35.000
PIKES PEAK LIBRARY	3.325
PEYTON FIRE DISTRICT	6.137
KIOWA CONSERVATION DISTRICT	
2007 Tax Rate:	51.976 mills

Mark Lowderman
Assessor, El Paso County

Please note that appraisal records are subject to change without notification.

Printed: 04/01/2008 **By:** AMIDEI

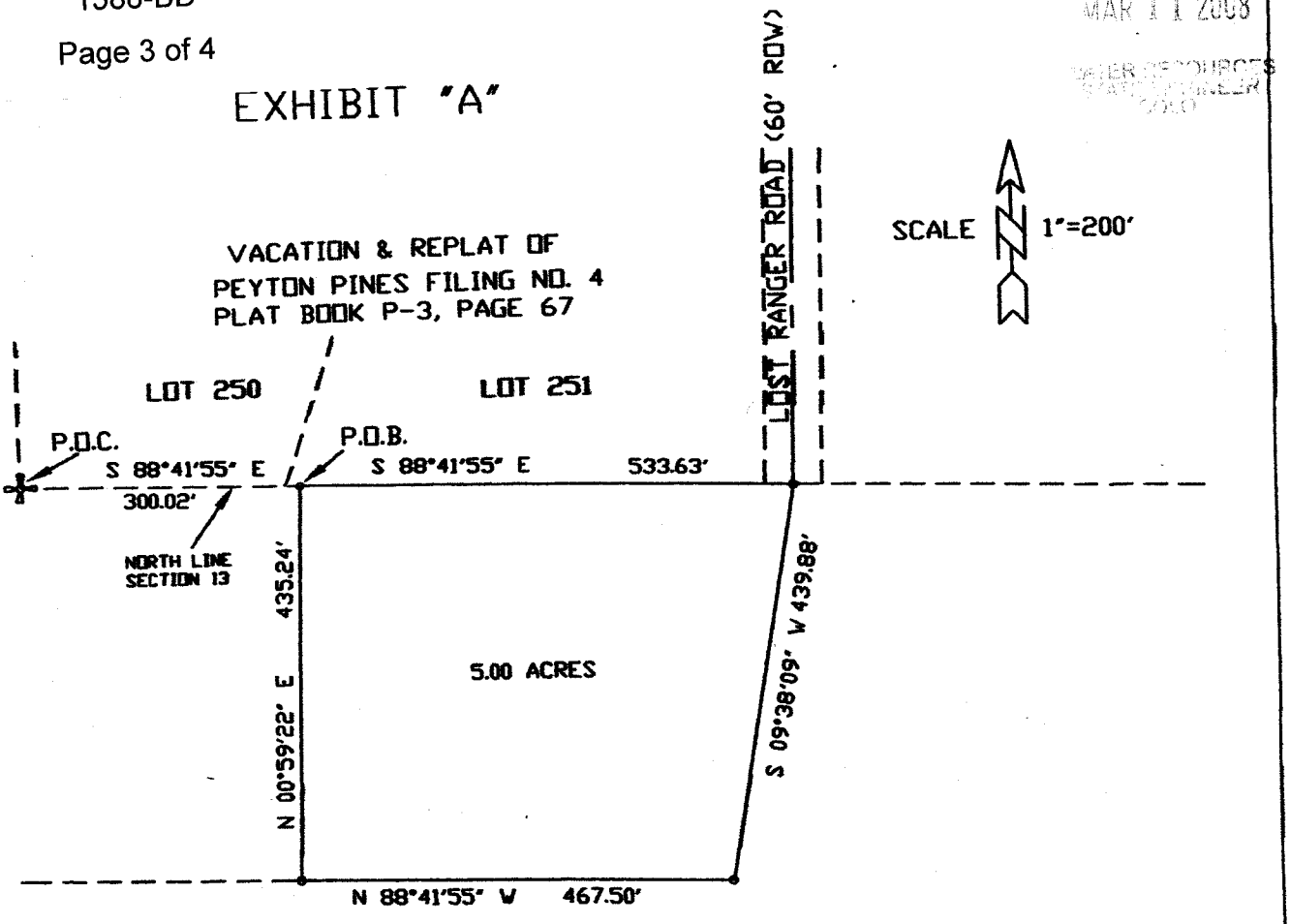
This is a 5 acre parcel with an existing well. This 5 acres is included in the 74.50 acre/pe amount.

EXHIBIT A

1588-BD

Page 3 of 4

EXHIBIT "A"



UNITED PLANNING ENGINEERING

4575 GALLEY ROAD SUITE 200
COLORADO SPRINGS COLORADO
(719) 597-9900 80915

PROJECT	DATE	DRAWN
05-0102	1-26-05	J.L.K.

C:\Projects 2005\05-0102\05-0102.dwg

UNITED
PLANNING &
ENGINEERING

planners • consultants • engineers • landscape architects • surveyors

(719) 597-9900 FAX (719) 597-9905

EXHIBIT A

JANUARY 25, 2005

1588-BD

LEGAL DESCRIPTION:

A PORTION OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 11 SOUTH, RANGE 64 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE S 88°41'55" E ALONG THE NORTH LINE OF SAID SECTION 13, 300.02 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID NORTH LINE, S 88°41'55" E, 533.63 FEET; THENCE S 09°38'09" W, 439.88 FEET; THENCE N 88°41'55" W PARALLEL TO SAID NORTH LINE, 467.50 FEET; THENCE N 00°59'22" E, 435.24 FEET TO THE POINT OF BEGINNING AND CONTAINING 5.000 ACRES MORE OR LESS. (SEE EXHIBIT "A")

4575 GALLEY RD. SUITE 200, COLORADO SPRINGS, CO 80915

34

COLORADO GROUND WATER COMMISSION
DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 Sherman St, Room 818, Denver, CO 80203

RECEIVED
MAR 11 2008
WATER RESOURCES
STATE ENGINEER
COLO

APPLICATION FOR DETERMINATION OF WATER RIGHT WITHIN A DESIGNATED GROUND WATER BASIN PURSUANT TO SECTION 37-90-107(7), C.R.S.

Please note: This application may only be used to apply for a determination of rights to ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer underlying land areas located within a Designated Ground Water Basin. Review the instructions on the reverse of this form. This form must be completed, signed, dated and submitted to the Ground Water Commission with a non-refundable $60 filing fee. A separate form must be used for each aquifer determination. Type or print in black ink.

1. APPLICANT INFORMATION

Name of Applicant
Alice Jolene Owens

Applicant Mailing Address
18430 Lost Ranger Rd. Peyton, Co. 80831

Applicant Telephone Number (include area code) 719-596-7447

2. AMOUNT OF OVERLYING LAND – the total land area claimed and described by the applicant in Item #8 below, consisting of 74.50 AC acres.

3. AQUIFER
Dawson

4. EXISTING WELLS – Are there any wells located on the claimed and described overlying land? Yes X No ____
If yes, provide a complete list of all wells located on the overlying land area as an attachment to this application.

5. ANNUAL AMOUNT OF GROUND WATER – to be withdrawn, for intended beneficial uses, from the aquifer underlying the described land area claimed by the applicant in Item #8 below. Please specify one of the following:

☒ Maximum allowable annual acre-feet ☐ _____ acre-feet annually ☐ Maximum allowable annual acre-feet, excluding _____ acre-feet from that amount

6. USE OF GROUND WATER – description of intended beneficial uses of the ground water to be withdrawn from the aquifer
Domestic, Stock watering, Irrigation, Commercial and replacement supply.
Also, allocating and reserving 2 acre feet annually for existing well.

7. PLACE OF USE – of the ground water shall be considered to be that overlying land area claimed and described by the applicant in Item #8 below, unless a legal description or accurate scale map is provided which describes an alternate/additional place of use.

8. REQUIRED LANDOWNERSHIP DOCUMENTATION - The Ground Water Commission shall allocate ground water from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifer on the basis of ownership of overlying land. For this reason, a Nontributary Ground Water Landownership Statement (form GWS-1) or Nontributary Ground Water Consent Claim (form GWS-48), including a description of the overlying land area subject to this determination, must be submitted as an attachment to the application.

9. SIGNATURE OF APPLICANT - must be original signature – The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.

Signature Alice Jolene Owens Date 3/12/08

- print name and title Alice Jolene Owens

FOR OFFICE USE ONLY

Trans Number: 3626756
3/11/2008 2:30:28 PM
James Martin (19)
Total Trans Amt: $60.00
CHECK
Check Number: 12970
Check Amount: $60.00

DIV 8 CO ____ WD 1 BASIN 2 MD ____

DETERMINATION OF WATER RIGHT EVALUATION SHEET
SECTION 37-90-107(7)

APPLICANT: **Owens, Alice Jolene**

BASIN: Kiowa-Bijou GWMD: None

COUNTY: El Paso

AQUIFER: **Dawson** RECEIPT NO. 3626757

NUMBER OF ACRES IN TRACT: 74.5

GENERAL LOCATION: W1/2 of the NW1/4 of Section 13, T11S, R64W

AQUIFER DATA

AMOUNT AVAILABLE FOR APPROPRIATION: (150 SS)(74.5 Acres)(0.2 SY) = 2235 AF = 22.4 AFyr

ADJUSTMENTS: -3 AF/yr for small capacity well

ANNUAL AMOUNT: **19.4 AFyr**

PRE.NOV.19, 1973 WELLS (COMPLETED IN AQUIFER) IN VICINITY:

AREA CHECKED: Sections 11, 12, 13, 14, 23, 24 in T11S, R64W
Sections 7, 18, 19 in T11S, R63W

SMALL-CAPACITY WELLS (COMPLETED IN AQUIFER) LOCATED ON CLAIMED TRACT: 1

Permit No. 260301 – Domestic well screened from 275 to 355 feet in the Dawson aquifer (485 to 565 feet bgs). Location NW1/4 of the NW1/4 of Section 13, T11S, R64W. Permitted for a maximum annual withdrawal of 3 AF/yr.

REPLACEMENT WATER STATUS OF CLAIMED LAND AREA: **Not-nontributary (actual impact replacement)**

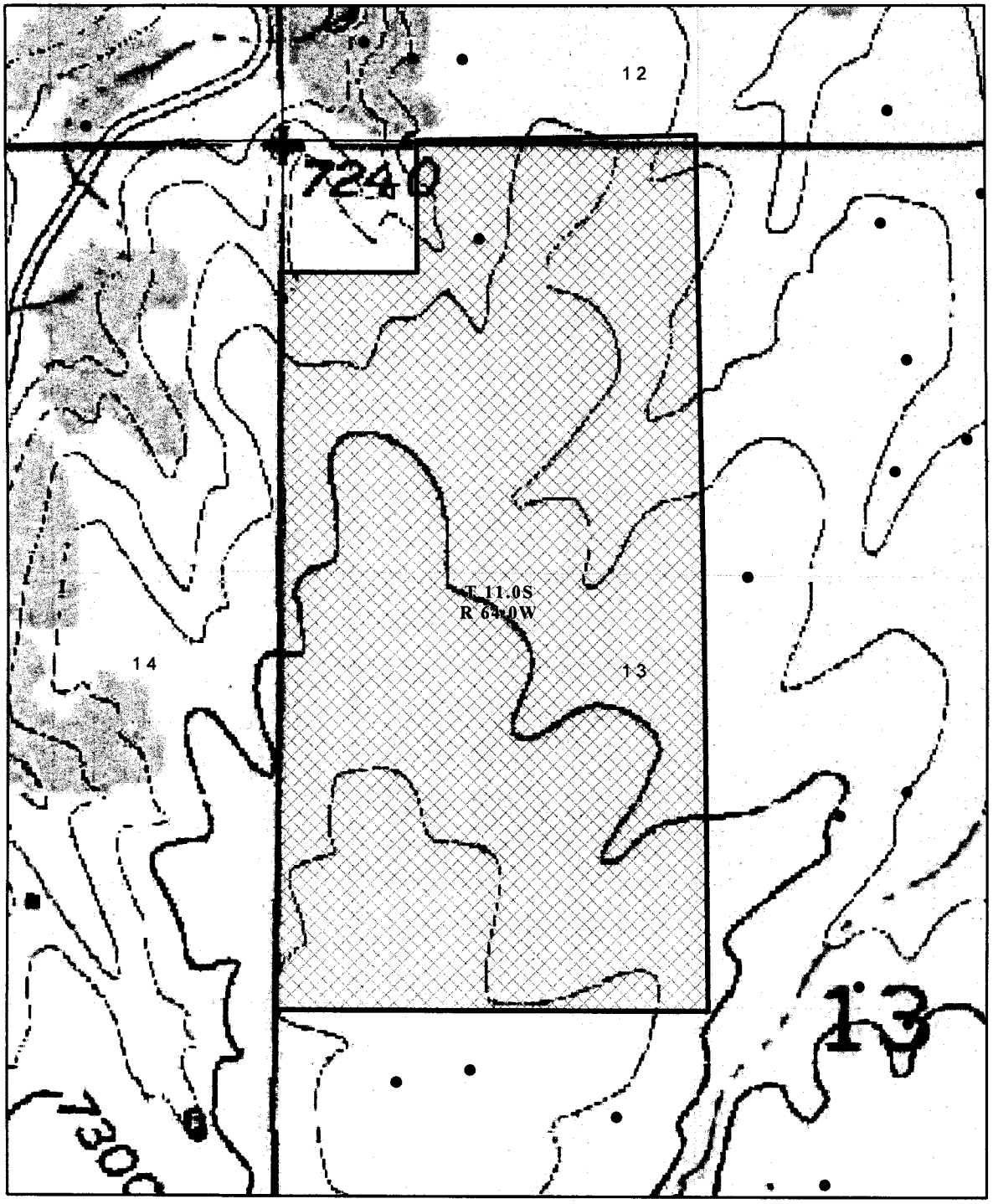
REPLACEMENT PLAN REQUIRED: Yes

AQUIFER INTERVAL (CENTRAL DATA POINT): 210 to 790 bgs

COMMENTS: The SS was considered to be 150 feet based on the static water level and depth to the base of the aquifer at the location of a small-capacity well located on the property, Permit No. 260301.

SS = (Base – SWL)/2
SS = (775 ft -475 ft) /2 = 150 ft

Evaluated by MAP, 3/26/2008
Reviewed by SKR, Ground Water Commission Staff



COLORADO DIVISION OF WATER RESOURCES

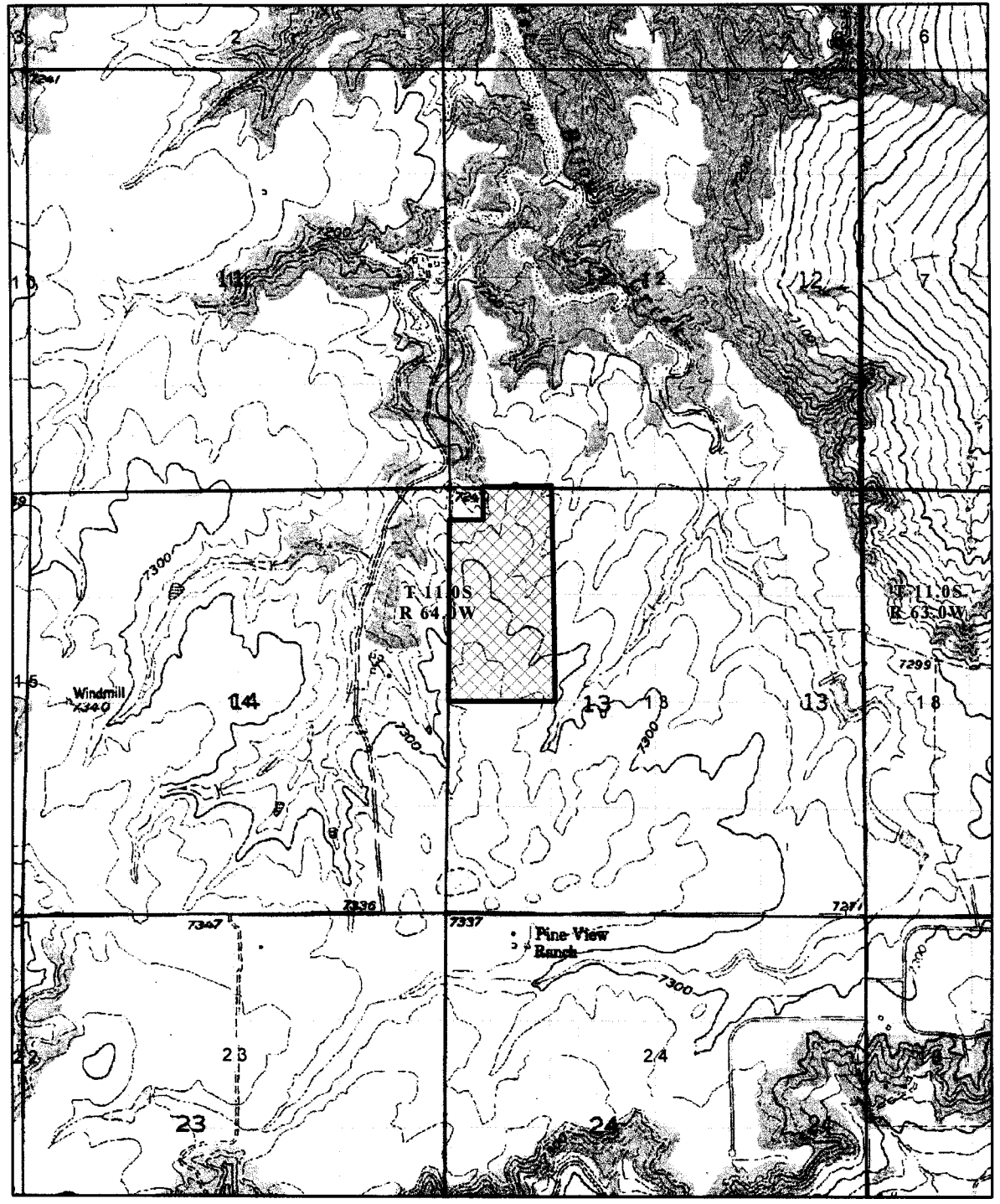
BASIN: Kiowa Bijou

Wells

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

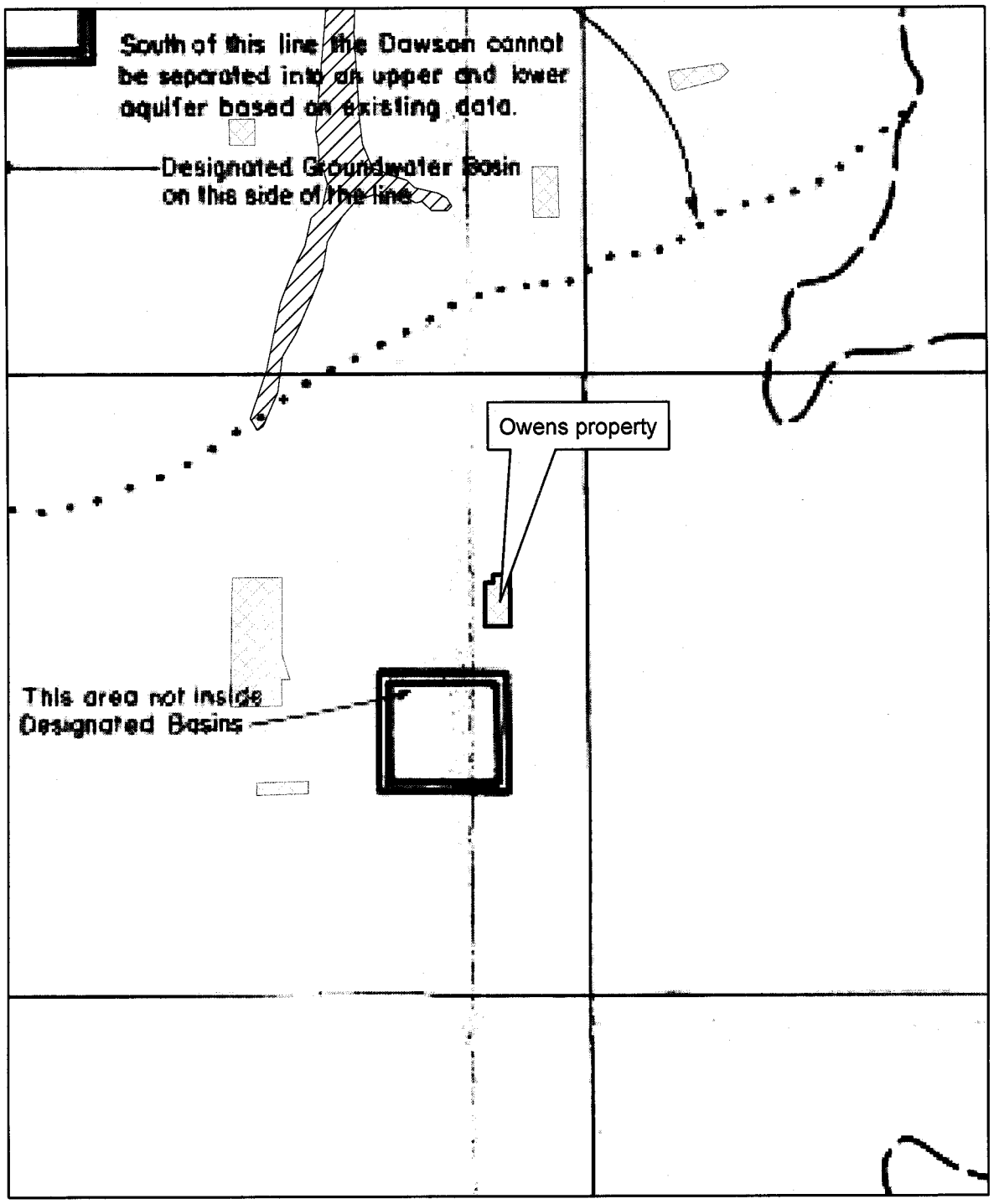
BASIN: Kiowa Bijou

Property Location

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

N



COLORADO DIVISION OF WATER RESOURCES

BASIN: Kiowa Bijou

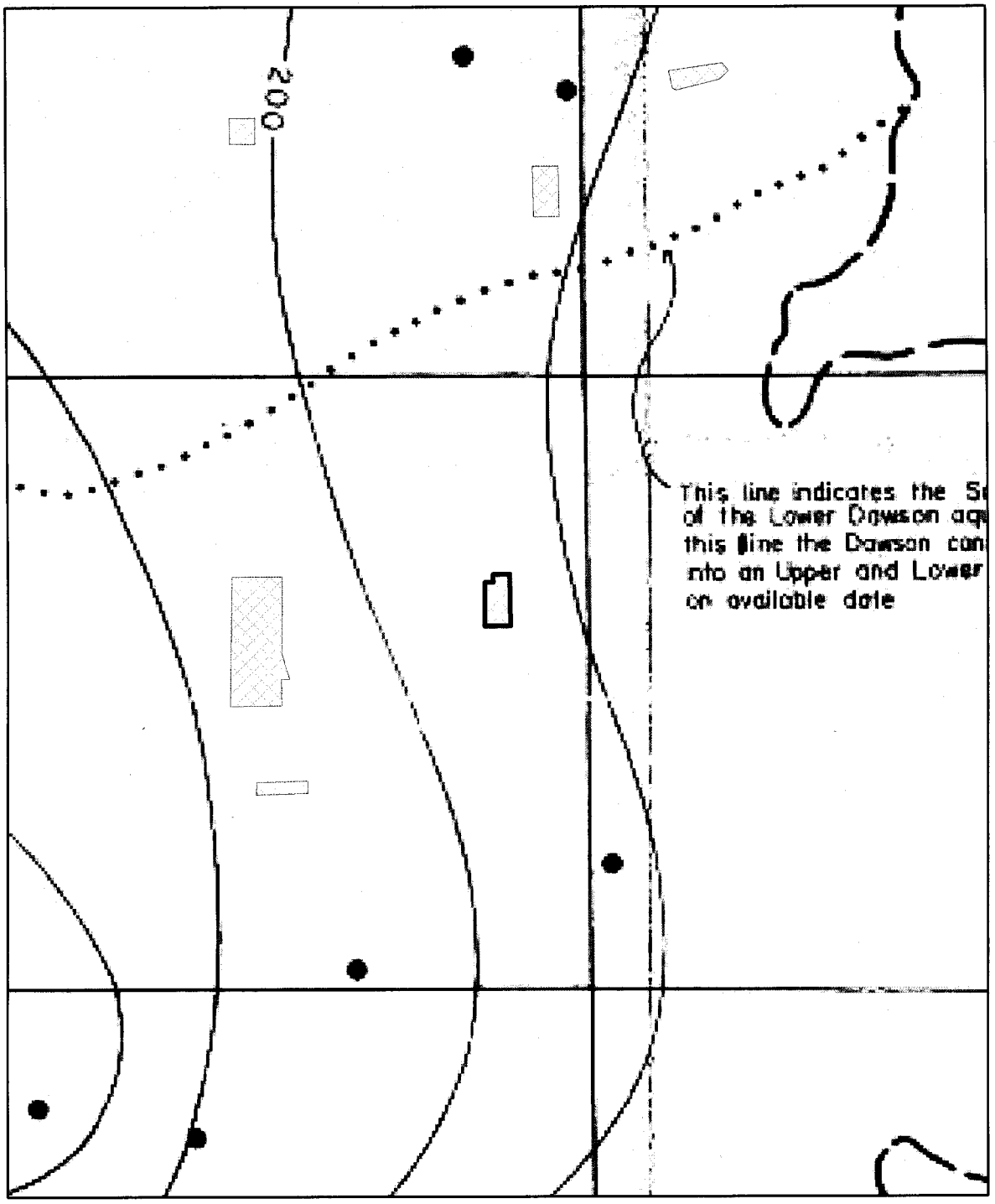
Tributary map
Upper Dawson aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NNT AIR

N



COLORADO DIVISION OF
WATER RESOURCES

BASIN: Kiowa Bijou

Saturated Sands map
Upper Dawson aquifer

Alice Jolene Owens
Section 13
Township 11 South
Range 64 West

El Paso County
Area claimed: 74.5 acres

NNT AIR

N

FORM NO. GWS-31 10/94

WELL CONSTRUCTION AND TEST REPORT

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St. Rm 818, Denver, CO 80203

For Office Use only

RECEIVED

JAN 27 2005

WATER RESOURCES STATE ENGINEER COLO.

1. **WELL PERMIT NUMBER** 260301

2. OWNER NAME(S) Alice Jolene Owens
Mailing Address Box 322
City, St. Zip Peyton Co 80831
Phone (719) 598-7661

3. WELL LOCATION AS DRILLED: NW 1/4 NW 1/4, Sec. 13 Twp. 11 S, Range 64 W
DISTANCES FROM SEC. LINES:
300 ft. from North (north or south) Sec. line. and 600 ft. from West (east or west) Sec. line. OR
SUBDIVISION: LOT BLOCK FILING(UNIT)
STREET ADDRESS AT WELL LOCATION: 18430 Lost Ranger Road

4. GROUND SURFACE ELEVATION ft. DRILLING METHOD Rotary Air
DATE COMPLETED Jan 21 2005 TOTAL DEPTH 565 ft. DEPTH COMPLETED 565 ft.

5. GEOLOGIC LOG:

Depth	Description of Material (Type, Size, Color, Water Location)
0-2	TopSoil
2-29	Sand & Rocks
29-51	Sand & Clay
51-73	Clay
73-121	Sand & Gravel
121-125	Clay
125-143	Sand & Clay Mix
143-164	Sand
164-170	Gray Clay
170-303	Sand
303-308	Clay
308-447	Sand
447-462	Greg Clay
462-565	Sand

REMARKS:

6. HOLE DIAM.

(in.)	From (ft)	To (ft)
9	0	41
6 1/2	41	565

7. PLAIN CASING

OD (in)	Kind	Wall Size	From(ft)	To(ft)
7	Steel	188	+1	41
4 1/2	pvc	1/4	10	485

PERF. CASING: Screen Slot Size: 30th

4 1/2	pvc	1/4	485	565

8. FILTER PACK:
Material Gravel
Size 1/4-
Interval 73-565

9. PACKER PLACEMENT:
Type
Depth

10. GROUTING RECORD:

Material	Amount	Density	Interval	Placement
Cement	7 Sk	49 Gal	10-73	Tremmie

11. DISINFECTION: Type HTH Amt. Used 1/2 Cup

12. WELL TEST DATA: ☐ Check box if Test Data is submitted on Form No. GWS 39 Supplemental Well Test.
TESTING METHOD Aired and Bailed
Static Level 475 ft. Date/Time measured Jan 21 2005, Production Rate 10 gpm.
Pumping level 530 ft. Date/Time measured Jan 21 2005, Test length (hrs.) 4
Remarks

13. I have read the statements made herein and know the contents thereof, and that they are true to my knowledge. [Pursuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.]

CONTRACTOR Hamacher Well Works Inc Phone (719) 541-2460 Lic. No. 71
Mailing Address Box 86 Simla Co 80835

Name/Title (Please type or print)	Signature	Date
T.R. Hamacher	T.R. Hamacher	Jan 25 2005

Form No. GWS-25

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

LIC

WELL PERMIT NUMBER 260301 - - -
DIV. 8 WD 1 DES. BASIN 2 MD

APPLICANT

ALICE JOLENE OWENS
P O BOX 322
PEYTON, CO 80831-

(719) 598-7661

PERMIT TO CONSTRUCT A WELL

APPROVED WELL LOCATION
EL PASO COUNTY
NW 1/4 NW 1/4 Section 13
Township 11 S Range 64 W Sixth P.M.

DISTANCES FROM SECTION LINES
300 Ft. from North Section Line
600 Ft. from West Section Line

UTM COORDINATES (NAD83)
Easting: Northing:

CONDITIONS OF APPROVAL

1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
3) Approved pursuant to CRS 37-90-105.
4) Water from this well may be used for domestic purposes inside 1 single family dwelling(s), and the watering of the owner's own large non-commercial domestic animals.
5) The pumping rate of this well shall not exceed 15 GPM.
6) The annual withdrawal of ground water from this well shall not exceed 3 acre-feet.
7) The irrigated area shall not exceed 1 acre of lawn and garden.
8) Water from this well may be used for the watering of livestock on range and pasture.
9) The total depth of the well shall not exceed 775 feet, which corresponds to the base of the Dawson aquifer. At a minimum, plain casing shall be installed and grouted through all unconsolidated materials and shall extend a minimum of ten feet into the bedrock formation to prevent production from other zones.
10) This well must be constructed within 300 feet of the location specified on this permit.

NOTE: The ability of this well to withdraw its authorized amount of water from this non-renewable aquifer may be less than the 100 years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

NOTICE: This permit has been approved with a change to the permit application form from that applied for by the applicant. You are hereby notified that you have the right to appeal the issuance of this permit, by filing a written request with this office within sixty (60) days of the date of issuance, pursuant to the State Administrative Procedures Act. (See Section 24-4-104 through 106, C.R.S.)

APPROVED
SMJ

Hal D. Simpson
State Engineer

Sandy Johnson
By

Receipt No. 0531706 DATE ISSUED 11-08-2004 EXPIRATION DATE 11-08-2006

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

I, Susan Lister, do solemnly affirm that I am the Publisher of RANCHLAND NEWS; that the same is a weekly newspaper published at Simla, County of Elbert, State of Colorado, and has a general circulation therein; that said newspaper has been continuously and uninterruptedly published in said County of Elbert for a period of at least 52 consecutive weeks next prior to the first publication of the annexed notice, that said newspaper is entered in the post office at Calhan, Colorado as second class mail matter and that said newspaper is a newspaper within the meaning of the Act of the General Assembly of the State of Colorado, approved March 30, 1923, and entitled "Legal Notices and Advertisements," with other Acts relating to the printing and publishing of legal notices and advertisements. That the annexed notice was published in the regular and entire issue of said newspaper, once each week for two successive weeks; that the first publication of said notice was in the issue of said newspaper dated:

April 3, 2008

and the last publication of said notice was in the issue of said newspaper dated:

April 10, 2008

and that copies of each number of said paper in which said notice and/or list was published were delivered by carriers or transmitted by mail to each of the subscribers of said newspaper, Ranchland News, according to the accustomed mode of business in this office.

Susan Lister
Publisher

The above certificate of publication was subscribed and affirmed to before me, a Notary Public, to be the identical person described in the above certificate, on the

10 day of April, 2008

Nikki Lister
Notary Public

1/22/12
(My Notary Public Commission Expiration Date)

Determinations of Water Right

BEFORE THE COLORADO GROUND WATER COMMISSION

KIOWA BIJOU DESIGNATED GROUND WATER BASIN– EL PASO COUNTY

TAKE NOTICE that pursuant to Section 37-90-107(7), C.R.S., Alice J. Owens (hereinafter "applicant") has applied for determinations of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills, Arapahoe, Denver and Dawson aquifers underlying 74.5 acres generally described as W1/2 of the NW1/4 of Section 13, Township 11 South, Range 64 West of the 6th P.M. The applicant claims ownership of this land and control of the ground water in the above-described aquifers under this property. The ground water allocations from these aquifers will be used on the described property for the following beneficial uses: domestic, stock watering, irrigation, commercial and replacement. The maximum allowable annual amount of ground water in each aquifer underlying the described property will be allocated.

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, the Colorado Ground Water Commission shall allocate ground water from the above-described aquifers based on ownership of the overlying land and an aquifer life of one hundred years. A preliminary evaluation of the applications by the Commission Staff finds the annual amount of water available for allocation from each of the described aquifers underlying the above-described property to be as follows: 24.6 acre-feet for the Laramie-Fox Hills, 29.1 acre-feet for the Arapahoe, 38.0 acre-feet for the Denver, and 18.6 acre-feet for the Dawson, subject to final staff evaluation. The estimated available annual acre-feet allocation amount for each aquifer indicated above may be increased or decreased by the Commission to conform to the actual aquifer characteristics, based upon site specific data. The amount for the Dawson aquifer represents a reduction in the initial annual amount determined to be available to allow for the annual withdrawal of a small-capacity well located on the described property area, permit no. 260301.

In accordance with Rule 5.3.6 of the Designated Basin Rules, the Commission Staff's preliminary evaluation of the applications finds the replacement water requirement status for the above aquifers underlying the above-described property to be as follows: nontributary for the Laramie-Fox Hills, nontributary for the Arapahoe, nontributary for the Denver, and not-nontributary (actual impact replacement) for the Dawson.

Upon Commission approval of these determinations of water right, well permits for wells to withdraw the allowed allocation from a specific aquifer shall be available upon application, subject to the conditions of the determination and the Designated Basin Rules and subject to approval by the Commission. Such wells must be completed in the specified aquifer and located on the above described 74.5 acre property.

Any person wishing to object to the approval of these determinations of water right must do so in writing, briefly stating the nature of the objection and indicating the above applicant, property description and the specific aquifers that are the subject of the objection. The objection must be accompanied by a $10 fee and must be received by the Commission Staff, Colorado Ground Water Commission, 818 Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, by May 12, 2008.

First Publication April 3, 2008
Final Publication April 10, 2008
In Ranchland News
Legal No. 12,842

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Dick Wolfe, P.E.
Director

May 20, 2008

Alice Jolene Owens
18430 Lost Ranger Road
Peyton, CO 80831

RE: Determination of Water Right

Dear Ms. Owens:

Enclosed are 2 copies of the Colorado Ground Water Commission's Findings and Order for Determination of Water Right No. **1588-BD**, for the allocation of ground water in the **Dawson** aquifer. This Findings and Order is the Commission's approval of your application for determination of rights to ground water in the above stated aquifer. This document contains important information about your water right and should be reviewed and retained for your records.

As indicated in the Order, a copy of this determination must be recorded by the applicant in the public records of the county – in which the overlying land is located – so that a title examination of the overlying land claimed in the application, or any part thereof, shall reveal this determination. An additional copy of the Findings and Order is enclosed for this purpose.

If you have any questions, please contact this office.

Sincerely,

Melissa A. Peterson

Melissa A. Peterson, P.E.
Water Resources Engineer
Designated Basins Team

enclosures: a/s

Appendix D

W.W. ENTERPRISES *Consulting Engineering*
2115 9th Street, P.O. Box 1242, Limon, Colorado 80828 (719) 775-9314

August 15, 2019
Project No: 19-3028

SUBSURFACE INVESTIGATION AND SOILS REPORT

DESCRIPTION: 17055 Red Barn Road,
El Paso County, Colorado

Prepared for:
Alice Jolene Owens
PO Box 2764
Florence, AZ 85132
(719) 596-7447

COLORADO REGISTERED
ANTHONY J. WERNSMAN
30318
11-5-19
PROFESSIONAL ENGINEER

SCOPE

This study was done to determine preliminary soils, Onsite Wastewater Treatment System (OWTS) suitability, and geology report with embankment analysis at the above referenced site.

The site is located in El Paso County, Colorado, northwest of the Town of Peyton. Ground cover consists of native grasses and small brush (weeds). The site generally slopes approximately 3% to the northeast on the property. The property is the W ½ of the NW ¼ of Section 13, T. 11 S., R. 64 W. of the 6th P.M., El Paso County, Colorado. It is our understanding that the property is to be subdivided into several lots. The majority of the lots surrounding the property have houses and OWTS already constructed.

FIELD EVALUATION

On August 1, 2019 Test **Holes A-1** through **A-5** were drilled across the south portion of the property. Samples were taken at 3'- 4' and 8'-9' depths. The samples were tested for gradation, Atterberg Limits, moisture content, and NRCS tactile testing. The attached Location Map indicates the location of the test holes on the property. The attached Log of Test Holes shows the soils encountered in the test borings. Samples were taken and tested to determine preliminary soil recommendations for the proposed structure foundations and OWTS recommendations for the site. The attached Grain Size Distribution Curves indicates the laboratory test results of the soil samples acquired during drilling.

TESTING RESULTS

Laboratory tests indicate the soils at the **3'-4'** depth in **Hole A-1** are A-4(0) AASHTO, ML ASTM soils. These soils are IRC (PPRBD) 2017 sandy silt. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-1 @ 3'-4':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	98
#10	95
#40	84
#100	80
#200	79

Atterberg Limit Tests, **Hole A-1 @ 3'-4':**

Liquid Limit - 31
Plastic Limit - 27
Plastic Index - 4

Natural Moisture Content, **Hole A-1 @ 3'-4':** 10.2%

Laboratory tests indicate the soils at the **8'-9'** depth in **Hole A-1** are A-4(0) AASHTO, ML ASTM soils. These soils are IRC (PPRBD) 2017 sandy silt. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-1 @ 8'-9':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	99
#10	92
#40	67
#100	63
#200	62

Atterberg Limit Tests, **Hole A-1 @ 8'-9':**

Liquid Limit - 31
Plastic Limit - 27
Plastic Index - 4

Natural Moisture Content, **Hole A-1 @ 8'-9':** 8.9%

Laboratory tests indicate the soils at the **3'-4'** depth in **Hole A-3** are A-4(0) AASHTO, CL ASTM soils. These soils are IRC (PPRBD) 2017 lean clay. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-3 @ 3'-4':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	100
#10	100
#40	97
#100	96
#200	96

Atterberg Limit Tests, **Hole A-3 @ 3'-4':**

Liquid Limit -	30
Plastic Limit -	21
Plastic Index -	9

Natural Moisture Content, **Hole A-3 @ 3'-4':** 20.4%

Laboratory tests indicate the soils at the **8'-9'** depth in **Hole A-3** are A-4(0) AASHTO, CL-ML ASTM soils. These soils are IRC (PPRBD) 2017 sandy silty lean clay. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-3 @ 8'-9':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	95
#10	91
#40	80
#100	72
#200	71

Atterberg Limit Tests, **Hole A-3 @ 8'-9':**

Liquid Limit -	25
Plastic Limit -	20
Plastic Index -	5

Natural Moisture Content, **Hole A-3 @ 8'-9':** 20.7%

Laboratory tests indicate the soils at the **3'-4'** depth in **Hole A-4** are A-6(1) AASHTO, CL ASTM soils. These soils are IRC (PPRBD) 2017 lean clay with sand. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-4 @ 3'-4':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	99
#10	96
#40	88
#100	86
#200	85

Atterberg Limit Tests, **Hole A-4 @ 3'-4':**

Liquid Limit - 32
Plastic Limit - 21
Plastic Index - 11

Natural Moisture Content, **Hole A-4 @ 3'-4':** 7.7%

Laboratory tests indicate the soils at the **8'-9'** depth in **Hole A-4** are A-6(2) AASHTO, SC ASTM soils. These soils are IRC (PPRBD) 2017 sandy clay. The soils are Low-swelling. No ground water was observed in the test hole to this depth.

Other mechanical properties of these soils are as follows:

Sieve Analysis, **Hole A-4 @ 8'-9':**

Sieve #	% Passing
3/4"	100
3/8"	100
#4	97
#10	84
#40	53
#100	47
#200	46

Atterberg Limit Tests, **Hole A-4 @ 8'-9':**

Liquid Limit - 32
Plastic Limit - 15
Plastic Index - 17

Natural Moisture Content, **Hole A-4 @ 8'-9':** 5.9%

CONCLUSIONS AND RECOMMENDATIONS

It is our understanding that the new structures on the subdivided lots will be houses. The upper and lower soils on the property exhibits low swell potentials. The soils at the site vary from sandy silt to lean clay to sandy silty lean clay to lean clay with sand to clayey sand.

I would recommend the structures be supported on a reinforced concrete foundation. I would further recommend the use of two reinforcing bars at both the top and bottom of the foundation wall to lessen damage, should the soils settle or swell. For the soils encountered and test results, it is recommended that the foundation be a continuous spread footing and/or grade beam foundation. Four inch (4") high void forms may be needed in strategic areas under the footings and grade beams in order to achieve and balance the recommended dead load.

For the soils encountered in this preliminary investigation, it is anticipated that the foundations will be designed for maximum allowable bearing capacities of 1500 to 2500 pounds per square foot (psf) (dead load plus fill live load) with a minimum dead load of 300 to 500 psf to help counteract the swelling should the subsoils become wetted. It is recommended that the dead loads for all foundation components (foundation wall footings and pads) be balanced to help control differential movement. For the soils encountered, an equivalent fluid unit weight of at 45 to 55 pounds per cubic foot should be used for retaining wall design. It is anticipated that the foundations will bear on the native soils on the property and not on uncompacted soil, topsoil, or frozen ground.

The bottom of all foundation components should be kept at least thirty-six inches (36") below finished grade for frost protection. The open excavations should not be left open for an extended period of time or exposed to adverse weather conditions. The completed open excavations should be observed by a representative of WW Enterprises in order to verify the subsurface conditions from test hole data.

The soils at the site shows a low swell potential. Therefore, future owners should be cautioned that there is a potential risk of future damage caused by introduction of excess water to the soils and/or rock. All future owners should be directed to those items under "Post-Construction Site Preparation and Maintenance" in Appendix I, included in this report. Our experience has shown that damage to foundations usually results in saturation of the foundation soils caused by improper drainage, excessive irrigation, poorly compacted backfills, and leaky water and sewer lines. The elimination of the potential sources of excessive water will greatly minimize the risks of construction at this site.

The findings and recommendations of this report have been obtained in accordance with accepted professional engineering practices in the field of Geotechnical Engineering. There is no other warranty, either expressed or implied. This report applies only to the type of construction anticipated in the area tested. The current technology is not at a stage where a guarantee of "absolutely no damage" can be assured by design and construction practices.

CONCRETE

All concrete shall have a minimum compressive strength of 3,000 PSI in 28 days. "Green concrete shall be protected from freezing when the ambient air temperature is below 40 degrees F.

No manufactured homes shall be placed on the foundation until the concrete has obtained a strength of 2,000 PSI or not less than seven (7) days. All walls shall be adequately braced to prevent deflection.

Changes in the moisture contents may result in consolidation or swelling of the subsoils, resulting in vertical slab movement. Therefore, slabs constructed should be "free-floating" so that the slabs can move unimpaired. Slabs placed on potentially expansive soils are expected to heave. Slabs should be isolated from all structural members of the foundation, utility lines, and partition walls. There should be a minimum one and one-half-inch (1½") void placed above or below partition walls located over slabs for slabs placed on the upper soils. The void should be increased to four inches (4") for slabs placed on bedrock stratum, if encountered. Failure to allow the slab to float independently will most likely result in structural, architectural, and utility line damage. One may choose to use "Fiber Mesh" or reinforcing bars in the flat work concrete to control cracking. Slabs should be scored at ten-foot intervals in both directions to further control any cracks that may develop.

REINFORCING STEEL

All reinforcing steel shall be grade 60. The bars, where possible, shall have 3" of clearance from any concrete surface. Unless otherwise approved, bars shall be placed as per plan. Not less than two #4 or #5 bars shall be provided around all window and door openings. Such bars shall be extended to develop the bar beyond the corners of the openings but not less than 24 in. Horizontal bars shall be continuous around windows, corners and step-downs unless otherwise detailed.

SOILS COMPACTION

All soils beneath slabs or foundations shall be compacted to 95% relative compaction per ASTM D 698. Backfilling shall not start until floor joists are in place for the first floor. In case the house or building is a modular or manufactured building, the building must be set on the foundation or have bracing in place that will not allow the wall to deflect during the backfilling operation. Fill around the foundation wall shall be compacted to 90% relative compaction, per the above specifications, after the concrete has obtained a compressive strength of 2,000 psi. In no case shall the backfill be placed less than 72 hours after the concrete placement. Topsoil is to be removed and soils beneath the structure should be compacted before the construction is started.

DRAINAGE CONTROL

Grading should be such that the surface water is drained away from the foundation. Minimum grade would be 1' vertical drop per 10' horizontal away from the foundation. Gutters and downspouts should be installed to help control roof drainage and help keep water away from the foundation.

A peripheral or perimeter drain/system is recommended where slabs are to be placed below finished grade (basement or crawl space used for storage). The drain should flow by daylighting. If this is not possible, the drain should be connected to the storm sewer, or provisions for a sump pump for future installation.

Gutters and downspouts should be installed to help control the water from the roof. Extensions should be installed and maintained to ensure that they drain outside the excavated area and passed any lawn edging.

If the consistency or color of the soil is different than in the soils report contact this office immediately.

SOILS INVESTIGATION FOR THE ON-SITE WASTEWATER TREATMENT SYSTEM (OWTS)

DETAILED SOIL INVESTIGATION

A. Soil Investigation

Method Used: Visual and tactile evaluation from the bag samples taken in the test holes was performed to provide preliminary soils evaluation for future OWTS.

B. Visual and Tactile Evaluation

The soils were observed and tested by Joe Wernsman under the supervision of Anthony J. Wernsman, P.E., who has been working as a field (soil drilling, sampling, testing and percolation tests) and laboratory (sieve analysis, Atterberg Limits, etc.) technician since 1989.

The soils were observed, tested, and compared to the soils indicated in Table 10-1 "Soil Treatment Area Long-term Acceptance Rates by Soil Texture, Soil Structure, Percolation Rate and Treatment" in the El Paso County Regulations of the El Paso County Board of Health "On-Site Wastewater Treatment Systems (OWTS) Regulations". The sandy silt encountered in Test Holes A-2 and the lower soils in Test Holes A-1 is Soil Type 2 sandy loam with blocky (bk) soil structure and moderate (2) soil grade. The upper sandy silt in Test Hole A-1 is Soil Type 3 clay loam with blocky (bk) soil structure and moderate (2) soil grade. The lean clay and sandy silty lean clay soil encountered in Test Hole A-3 is Soil Type 4 sandy clay with blocky (bk) soil structure and moderate (2) soil grade. The lean clay withy sand and sandy clay soil encountered in Test Hole A-4 is Soil Type 3 sandy clay loam with blocky (bk) soil structure and moderate (2) soil grade. Listed below are the tactile test results and the anticipated Long-Term Acceptance Rates (LTAR) for the soils tested.

Test Hole	Depth	Soil Type	LTAR (gpd/sf)
A-1	3'-4'	Type 3 clay loam	0.35
	8'-9'	Type 2 sandy loam	0.50
A-2	3'-4'	Type 2 sandy loam	0.50
	8'-9'	Type 2 sandy loam	0.50
A-3	3'-4'	Type 4 sandy clay	0.20
	8'-9'	Type 4 sandy clay	0.20
A-4	3'-4'	Type 3 sandy clay loam	0.35
	8'-9'	Type 2 sandy loam	0.50

The soil types vary across the site, so test pit evaluations are to be performed per the El Paso County OWTS Regulations to determine the Long-Term Acceptance Rates (LTAR) for the soils. The Soil Type 4 sandy clay soils will require that the OWTS in this area will need to be engineered. The other soils encountered will not require that the OWTS be engineered, only sized. The OWTS is to be sized or designed per the site specific test pit evaluation, resulting LTAR, and estimated effluent flow for each site.

SITE GEOLOGY

This investigation was carried out by means of site inspection by the author of this report, evaluation of test hole data from the soils investigation portion of this report, Geologic Map of Colorado by the U. S. G. S., "Rocky Mountain Region Oil and Gas Production Map by Terra Graphics, and information obtained from "Soil Survey of El Paso County Area, Colorado" by U. S. D. A. Soil Conservation Service and "Colorado Geology" by Rocky Mountain Association of Geologists, 1980.

1) Topography

   The Eastonville Quad Map was reviewed and indicates northwesterly, northerly, and northeasterly slopes. The contour lines and slopes on the site are shown on the Location Map in the report.

2) Soil Data

   The "Soil Survey of El Paso County Area, Colorado" from the NRCS was reviewed. Five (5) soil types are on the property. Brussett loam, 1 to 3 % slopes (14) is at the southeast corner of the property. Brussett loam, 3 to 5 % slopes (15) extends north to south across the approximate center of the property. Elbeth-Pring complex, 5 to 30 % (27) slopes is at the northwest corner of the property. Peyton-Pring complex, 3 to 8 % slopes (68) is on the east property line near the southeast corner of the property. Peyton-Pring complex, 8 to 15 % slopes (69) is at the northeast property corner, along the center of the east property line, and along the west property line, except at the northwest property corner.

The Brussett loam, 1 to 3 % slopes (14) has moderate permeability, effective rooting depth is 60" or more, high available water capacity, slow surface runoff, and moderate hazard of erosion. This soil is suited to wildlife habitat. The main limitation for urban development are moderate shrink-swell potential and frost action potential. Dwellings and roads can be designed to overcome these limitations. Permeability adversely affects the performance of septic tank absorption fields. Capability subclass IIIc.

The Brussett loam, 3 to 5 % slopes (15) has moderate permeability, effective rooting depth is 60" or more, high available water capacity, rapid surface runoff, and moderate hazard of erosion, especially when snow melts in spring while the ground is frozen. Some gullies are present. This soil is suited to wildlife habitat. The main limitation for urban development are moderate shrink-swell potential and frost action potential. Dwellings and roads can be designed to overcome these limitations. Permeability adversely affects the performance of septic tank absorption fields. Capability subclass IVe.

Elbeth-Pring complex. 5 to 30 % slopes (27) has moderate permeability, effective rooting depth is 60" or more, high available water capacity, high to medium surface runoff, and moderate to high hazard of erosion. Deep gullies occur throughout areas of this soil. Some soil slippage occurs on some of the steeper slopes. This soil is suited to wildlife habitat. The main limitation for construction are the moderate shrink-swell potential in the subsoil of the Elbeth soil and the steep slopes of both soils. Special site or building designs for dwellings and roads are required to offset these limitations. Special practices must be used to minimize surface runoff and keep soil erosion to a minimum. Capability subclass VIe.

The Peyton-Pring complex, 3 to 8 % slopes (68) has rapid permeability, effective rooting depth is 60" or more, moderate available water capacity, medium surface runoff, and moderate hazard of erosion. This soil is suited to habitat for openland and rangeland wildlife. These soils have a good potential for homesites. The main limitation are low bearing strength and frost action potential. Buildings and roads can be designed to overcome these limitations. Access roads should have adequate cut-slope grade and be provided with drains to control surface runoff and keep soil losses to a minimum. Capability subclass VIe.

The Peyton-Pring complex, 8 to 15 % slopes (69) has moderate to rapid permeability, effective rooting depth is 60" or more, moderate to high available water capacity, medium to rapid surface runoff, and moderate to high hazard of erosion. Some gullies have developed along drainageways and livestock trails. The soils in this complex are used as rangeland, for wildlife habitat, and for homesites. The main limitations are steepness of slope, limited ability to support a load, and frost action potential. Buildings and roads can be designed to overcome these limitations. These soils also require special site or building designs because of the slope. Access roads should have adequate cut-slope grade and be provided with drains to control surface runoff and keep soil losses to a minimum. Capability subclass VIe.

3) Floodplain Maps

   West Bijou Creek is approximately 1/2 mile east of the property. The proposed house and OWTS areas are approximately 40' upslope from the flow line. The site is outside the floodplain of the creek.

4) Geology and Basin Maps and Descriptions

   The 1979 Ogden Tweto "Geologic Map of Colorado" was reviewed. The map indicates that Twr – White River Formation is at the site. This includes ashy claystone and sandstone. Bedrock was not encountered in the soil borings made at the site.

5) Aerial Photographs

   Satellite maps of the area were reviewed to see if any items of note were apparent. The existing houses around the property and West Bijou Creek east of the property are apparent.

6) Climate Information

   From the USDA 25-YEAR 24 HOUR PRECIPITATION annual isopluvials for Colorado, the site is in an area of approximately 35" of evaporation per year.

7) Delineated Wetlands Maps

   The up and down slope areas of the property have the same vegetation throughout. Therefore, it appears that the moisture content across the site is consistent, and no wetlands are present.

Regional and Local Setting

The site lies in the Colorado Piedmont Section of the Great Plains Physiographic Province. The Colorado Piedmont is an elongated trough in the great plains, adjacent to the Front Range of the South Rockies. The Colorado Piedmont was formed when uplift of the area in Miocene-Eocene times (20–50 million years ago) produced an increase of stream erosion resulting in scouring next to the foothills and outlying areas. The Piedmont is bordered by the Southern Rockies to the west, Great Plains escarpment to the northeast, and Palmer Divide to the north. More particularly, the site is northeast of the City of Colorado Springs near the north line of El Paso County northeast of Black Forest.

Structurally, the site lies on the western edge of the Denver Basin, a thick accumulation of sediments involved with downwarping in the basin area and uplift of the adjacent highland areas in late Cretaceous and early Cenozoic. Small anticlinal folds occur adjacent to the Front Range in the sedimentary rocks and are conducive to the accumulation of oil and gas deposits. The closest know fault to the site is the Rampart Range Fault, which is approximately 18 miles to the west. The fault is believed to be inactive since no recent records of fault movement or earthquakes exist.

Slopes at the site are approximately 1 to 30 % with drainage flowing generally to the northeast. The site does not appear to be located within the 100-year or 500-year flood plain. Groundwater was not encountered in the 12' deep test holes that were drilled, so the groundwater levels are lower than a 12' depth.

Economic Geology

From the test borings made at the site, it does not appear that any mineral resources at the site. Therefore, it does not appear that any mineable areas are on the site. Based on the above data and criteria used, we feel that the site is not large enough and does not contain enough gravel to be economic for mining. Information on oil and gas deposits at the site were not available at this time and there are no oil and gas fields in the area.

Potential Geologic Hazards

Geologic hazards caused by gravity, such as landslides, rock fall, mud and debris flows, and snow avalanches are not anticipated in the present state of the site. Utility trenches may require shoring or bracing in order to create safe working conditions during construction.

The Soil Conservation Service (SCS) indicates that there are five (5) different soils across the site (see the above 2) Soil Data portion under Site Geology). Brussett loam, 1 to 3 % slopes (14) is at the southeast corner of the property. Brussett loam, 3 to 5 % slopes (15) extends north to south across the approximate center of the property. Elbeth-Pring complex, 5 to 30 % (27) slopes is at the northwest corner of the property. Peyton-Pring complex, 3 to 8 % slopes (68) is on the east property line near the southeast corner of the property. Peyton-Pring complex, 8 to 15 % slopes (69) is at the northeast property corner, along the center of the east property line, and along the west property line, except at the northwest property corner. These soils are described by the SCS as having shrink-swell potential, frost action potential, site slope, and low bearing strength. Buildings and roads can be designed to overcome these limitations. Access roads should have adequate cut-slope grade and be provided with drains to control surface runoff and keep soil losses to a minimum.

The soils, which are to support foundations, should be adequate for supporting the road and foundation loads. Each building site should have a complete geotechnical investigation and engineered foundation to minimize the effects of structures on the native sand, silt, and clay soils.

Groundwater Resources
Potable water is to be supplied by individual water wells on each lot. Shallow groundwater at the site should not be used as potable water but may be used for irrigation water pending acceptable water tests and well permits. Pollution of the groundwater caused by Onsite Wastewater Treatment Systems (OWTS) at the site should not exist due to having the OWTS evaluated and sized/designed per the El Paso County Health Department regulations.

Sewage Disposal
Sewage at the site is to be controlled by using Onsite Wastewater Treatment Systems (OWTS) at the site. The OWTSs used are to be evaluated and sized/designed per the El Paso County Health Department regulations.

Summary, Conclusions, and Recommendations
The site does not appear to be underlain with sand or gravel, so it is not a mineable site. Oil and gas wells are not located in the area, although sufficient information was not obtainable to determine the economic feasibility for oil and gas production at the site. Shrink-swell potential, frost action potential, site slopes, low bearing strength soils, and potential trench caving are hazards which will require attention prior to and during construction process.

Potential hazards can be minimized or eliminated by 1) a geotechnical investigation being performed for each subdivided property and following the recommendations in the report 2) OWTS evaluated and sized/designed per the El Paso County Health Department, and 3) site grading and drainage.

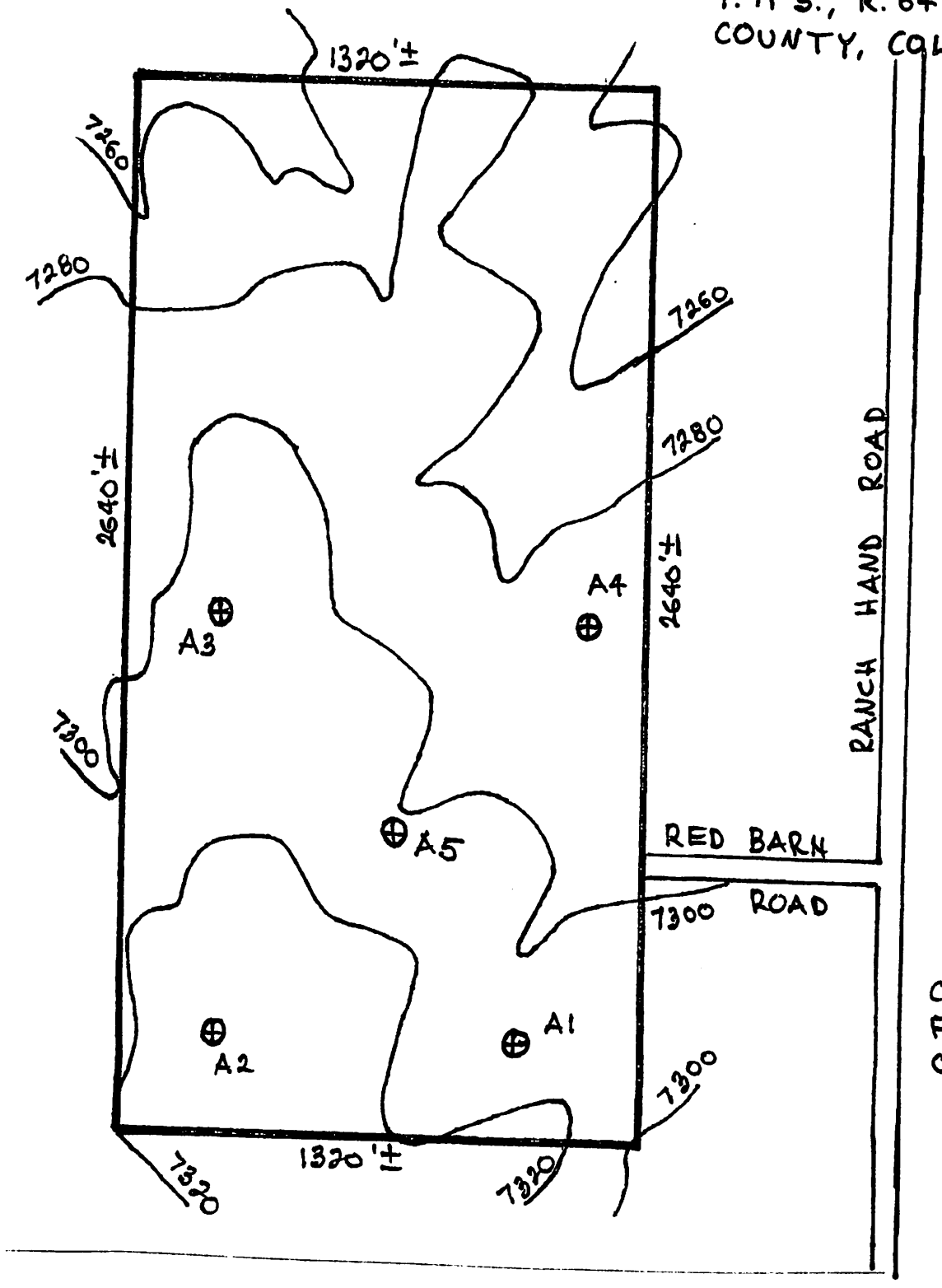
Based on the date mentioned in this report, we feel that the site is suitable for the proposed subdivided lots, provided the recommendations in this report are met. This report does not reflect any variations in surface and subsurface conditions either natural or manmade.

If there are any questions concerning information in this report, please contact our office.

W.W. ENTERPRISES

LOCATION MAP

W 1/2 NW 1/4 OF SECTION 13, T. 11 S., R. 64 W., EL PASO COUNTY, COLORADO.



CONTOUR LINES FROM EASTONVILLE QUAD MAP

SCALE: 1" = 400'

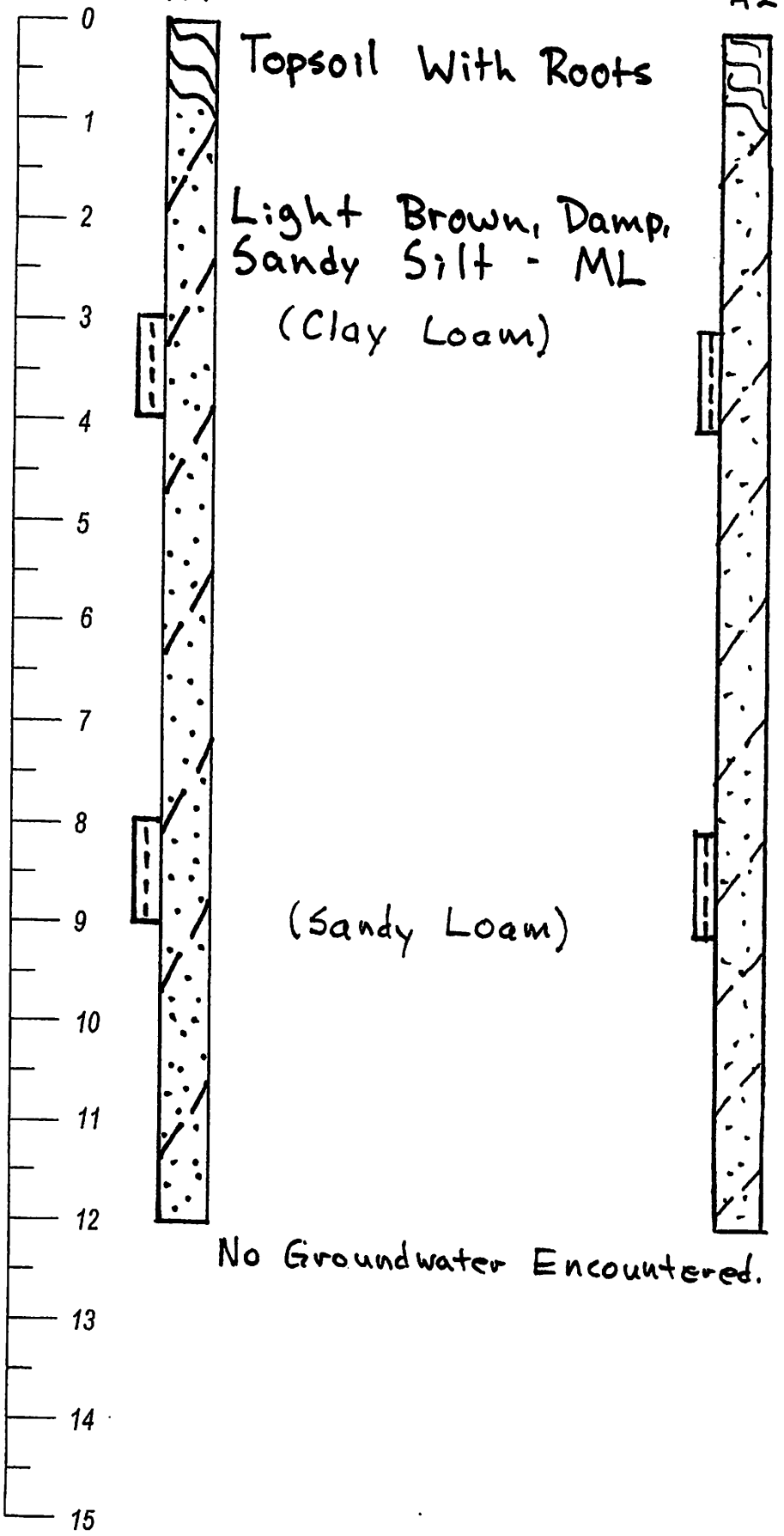
0 100 200 400 800 1200 1600

7055 Red Barn Road, Peyton, El Paso County, Colorado.

Name: Owens
Project No.: 19-3028

W.W. ENTERPRISES

LOG OF TEST HOLES

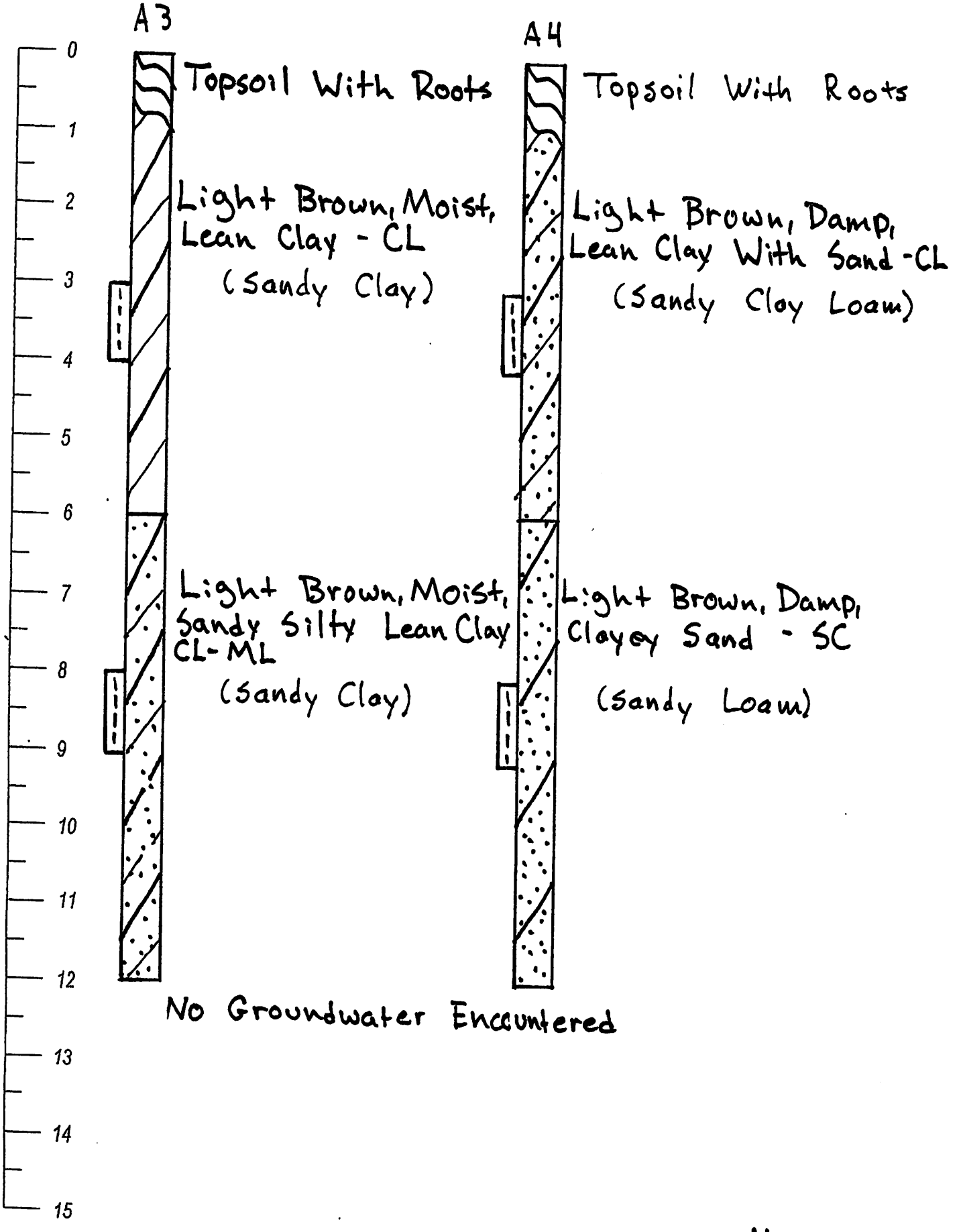


No Groundwater Encountered.

Name: Alice Owens
Project No.: 19-3028

W.W. ENTERPRISES

LOG OF TEST HOLES

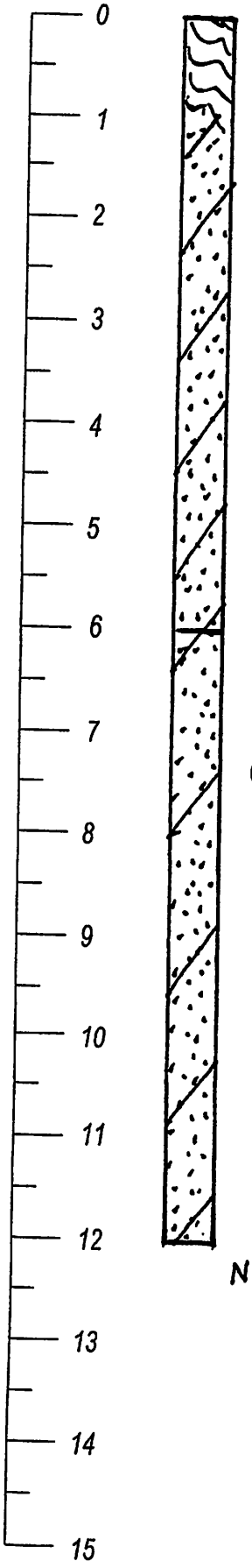


Name: Alice Owens
Project No.: 19-3028

W.W. ENTERPRISES

LOG OF TEST HOLES

A5



Topsoil With Roots

Light Brown, Damp,
Lean Clay With Sand - CL
(Sandy Clay Loam)

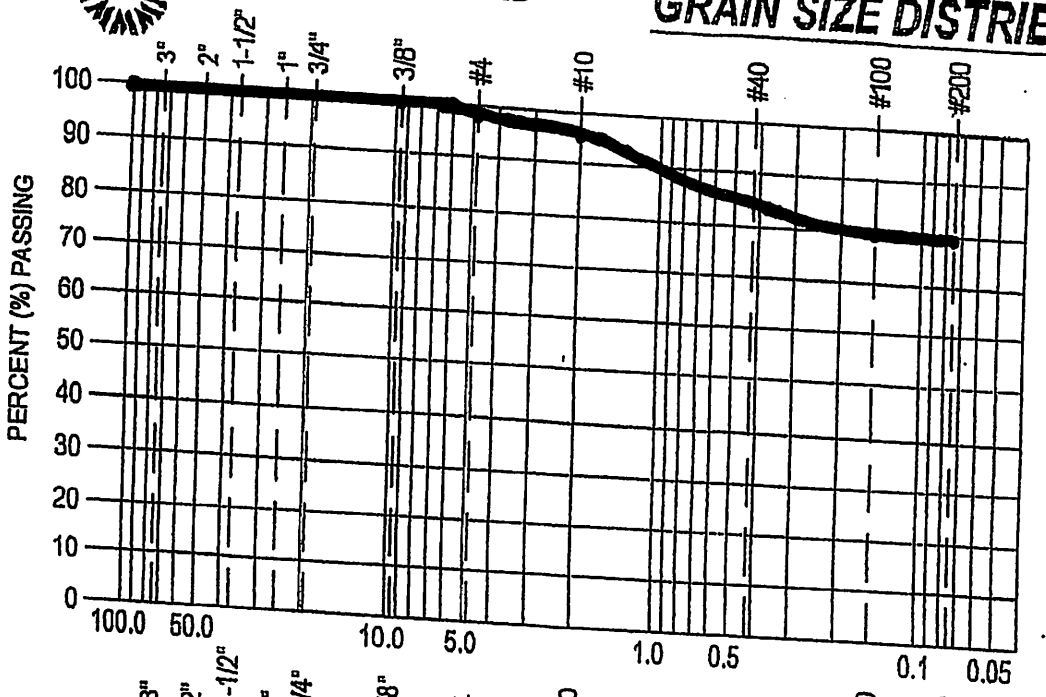
Light Brown, Damp,
Clayey Sand - SC
(Sandy Loam)

No Groundwater Encountered.

Name: Owens
Project No.: 19-3028

W.W. ENTERPRISES

GRAIN SIZE DISTRIBUTION CURVES



A1 @3'-4' LEVEL

A-4 (0) AASHTO

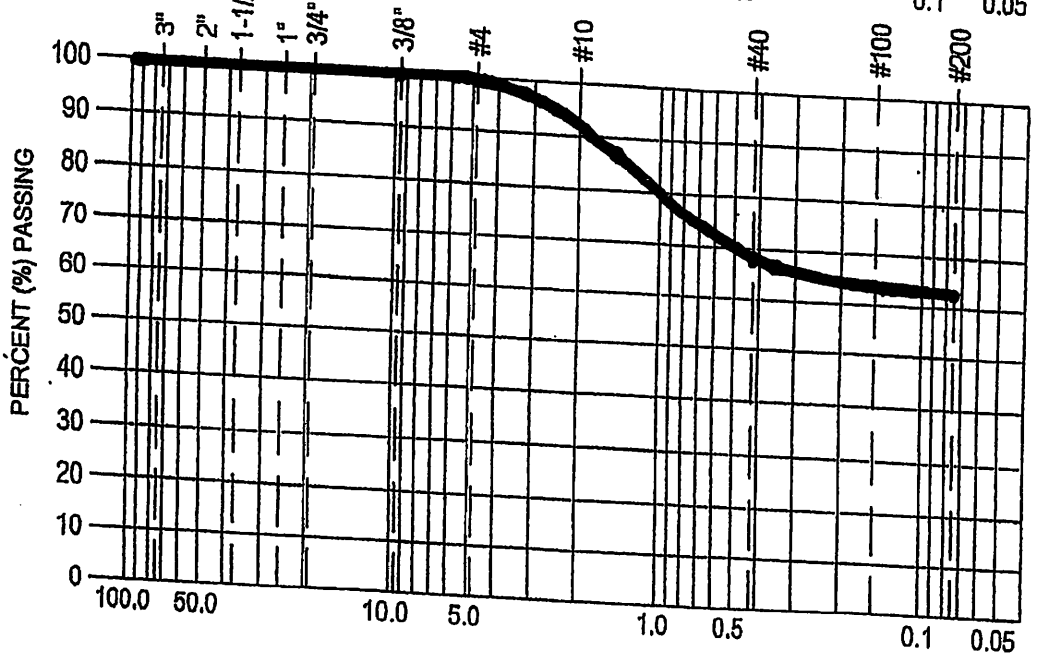
ML ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	98
#10	95
#40	84
#100	80
#200	79

LL-31, PL-27, PI-4

Low SWELLING

NATURAL MOISTURE CONTENT = 10.2 %



A1 @8'-9' LEVEL

A-4 (0) AASHTO

ML ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	99
#10	92
#40	67
#100	63
#200	62

LL-31, PL-27, PI-4

Low SWELLING

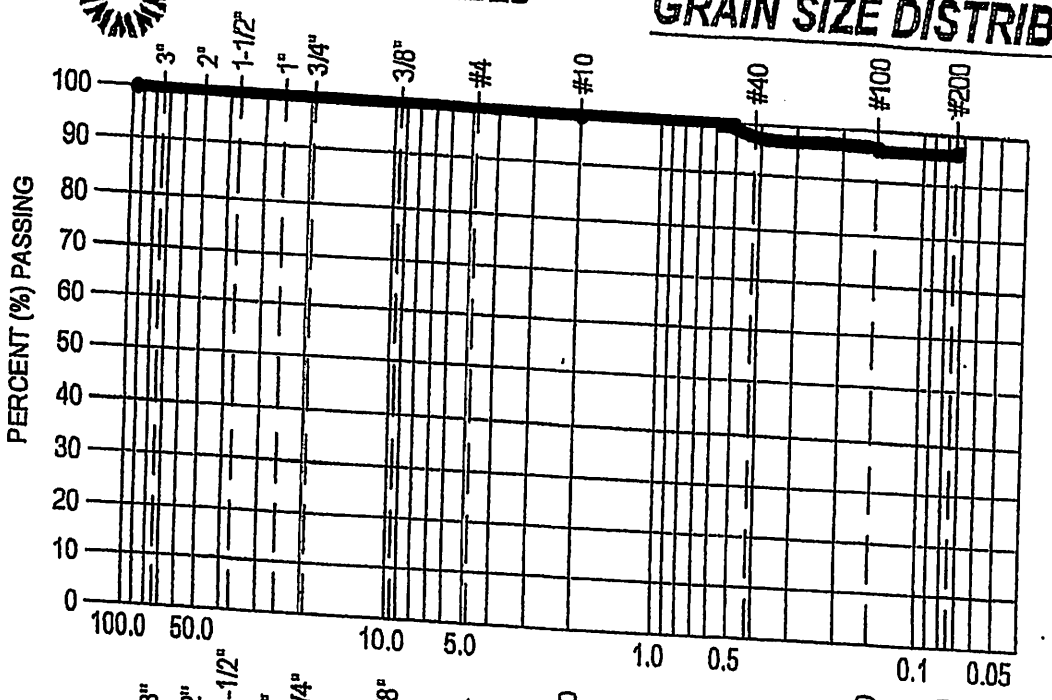
NATURAL MOISTURE CONTENT = 8.9 %

Name: Alice Owens

Project No.: 19-3028

W.W. ENTERPRISES

GRAIN SIZE DISTRIBUTION CURVES



A3 @ 3-4' LEVEL

A-4 (0) AASHTO

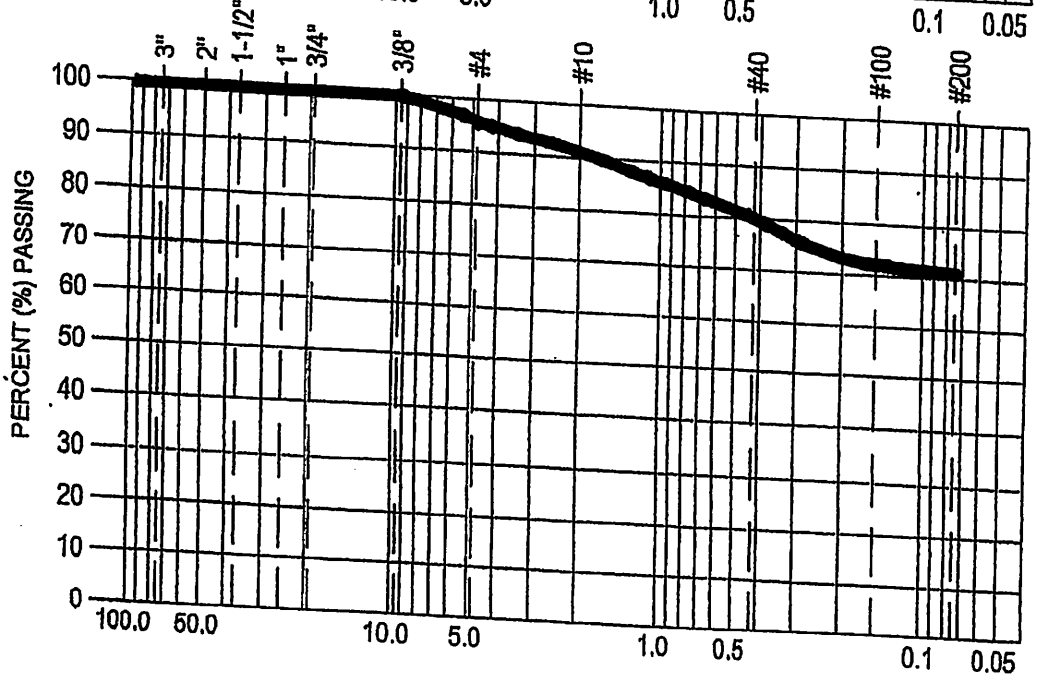
CL ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	100
#10	100
#40	97
#100	96
#200	96

LL-30, PL-21, PI-9

Low SWELLING

NATURAL MOISTURE CONTENT = 20.4 %



A3 @ 8-9' LEVEL

A-4 (0) AASHTO

CL-ML ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	95
#10	91
#40	80
#100	72
#200	71

LL-25, PL-20, PI-5

Low SWELLING

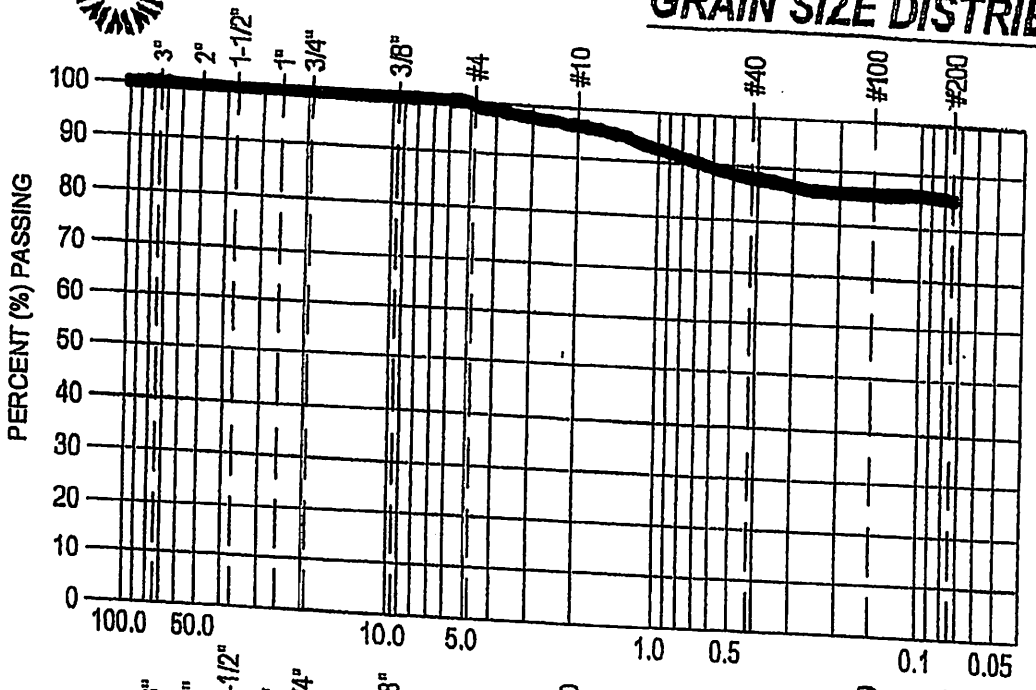
NATURAL MOISTURE CONTENT = 20.7 %

Name: Alice Owens

Project No.: 19-3028

W.W. ENTERPRISES

GRAIN SIZE DISTRIBUTION CURVES



A4 @ 3'-4' LEVEL

A-6 (1) AASHTO

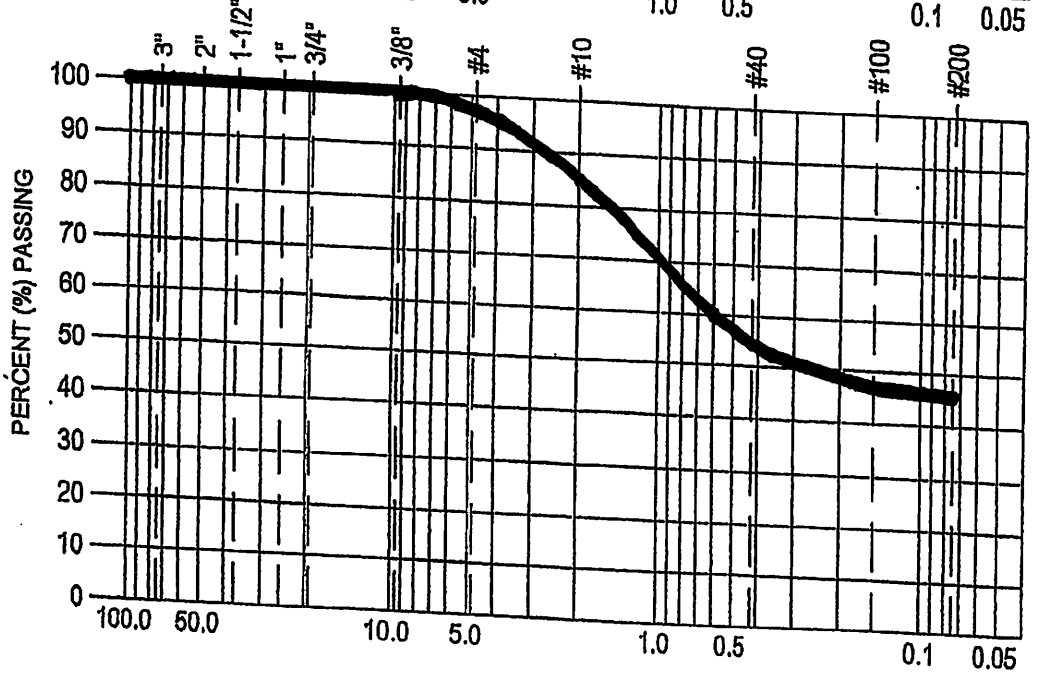
CL ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	99
#10	96
#40	88
#100	86
#200	85

LL - 32, PL - 21, PI - 11

Low SWELLING

NATURAL MOISTURE CONTENT = 7.7 %



A4 @ 8'-9' LEVEL

A-6 (2) AASHTO

SC ASTM

SIEVE	% PASSING
3/4"	100
3/8"	100
#4	97
#10	84
#40	53
#100	47
#200	46

LL - 32, PL - 15, PI - 17

Low SWELLING

NATURAL MOISTURE CONTENT = 5.9 %

Name: Alice Owens

Project No.: 19-3028

APPENDIX I

POST CONSTRUCTION SITE PREPARATION AND MAINTENANCE

Backfill:

When encountering potentially expansive or consolidating soils, measures should be taken to prevent the soil from being wetted during and after construction. Generally, this can be accomplished by ensuring that the backfill placed around the foundation walls will not settle after completion of construction, and that this backfill material is relatively impervious. Water may need to be added to backfill material to allow proper compaction - do not puddle or saturate. Backfill should be mechanically compacted to at least 95% of Standard Proctor around all structures and 90% of Standard Proctor elsewhere. Compaction requirements should be verified with field tests by the Engineer.

Surface Drainage:

The final grade should have a positive slope away from the foundation walls on all sides. A minimum of twelve inches (12") in the first ten feet (10') is recommended. Downspouts and sill cocks should discharge into splash blocks that extend beyond the limits of the backfill. Splash blocks should slope away from the foundation walls. The use of long downspouts in lieu of splash blocks is advisable. Surface drainage away from the foundation should be maintained throughout the lifetime of the structure.

Lawn Irrigation:

Do not install sprinkler systems next to foundation walls, porches, or patio slabs. If sprinkler systems are installed, the sprinkler heads should be placed so that the spray from the heads under full pressure does not fall within 5' of foundation walls, porches, or patio slabs. Lawn irrigation must be carefully controlled.

If the future owners desire to plant next to foundation walls, porches, or patio slabs, and are willing to assume the risk of structural damage, etc., then it is advisable to plant only flowers and shrubbery (no lawn) of varieties that require very little moisture. These flowers and shrubs should be hand watered only. Landscaping with a plastic covering around the foundation area is not recommended.

Check with your local landscaper for fabrics which allow evaporation when inhibiting plant growth when a plastic landscape covering is desired.

Experience shows that the majority of problems with foundations due to water conditions are generally due to the owner's negligence of maintaining proper drainage of water from the foundation area. The future owners should be directed to pertinent information in this report.

Eff. 01-14-05, revised 03-29-07

Appendix E

Colorado Department of Public Health and Environment

Inorganic Chemicals Certified Laboratory Report Form

WQCD - Drinking Water CAS
4300 Cherry Creek Drive South, Denver, CO 80246-1530
Fax: (303) 758-1398; cdphe.drinkingwater@state.co.us

Revised 6/13/2014

IOC

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)
Public Water System Information		**Certified Laboratory Information**
PWSID#:		Laboratory ID: CO 0015
System Name: Owens		Laboratory Name: Colorado Analytical Laboratory
Contact Person: Doug Schwenke	Phone #: 719-227-0072	Contact Person: Customer Service Phone: 303-659-2313
Comments:	Do Samples Need to be Composited BY THE LAB? ☐	Comments:

Section III (Supplied or Completed by Public Water System)			
Sample Date: 10/16/19	Collector: Stephanie Schwe	Facility ID (On Schedule): Dawson Well	Sample Pt ID (On Schedule): **Dawson Well**

Section IV Inorganic Chemicals (Completed by Certified Laboratory)

Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
10/17/19	10/17/19	191017013-01	Fluoride	7681-49-4	EPA 300.0	4	0.09	**0.42**

NT: Not Tested
Lab MRL: Laboratory Minimum Reporting Level
BDL: Below Laboratory MRL. A less than (<) may also used.

mg/L: Milligrams per Liter
MCL: Maximum Contaminant Level

11/11/19
191017013-01
1/1
N

Drinking Water Chain of Custody

1/2

Colorado Analytical Laboratories, Inc.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information
Company Name: JDS-Hydro
Contact Name: Doug Schwenke
Address: 5840 Tech Center Dr
City: CS State: CO Zip: 80919
Phone: 719-227-0072
Email: dschwenke@jdshydro.com
Sample Collector: Stephanie Schwenke
Sample Collector Phone: 719-321-5341

Bill To Information (If different from report to)
Company Name:
Contact Name:
Address:
City: State: Zip:
Phone:
Email:
PO Number:

Project Information
PWSID: N/A FVAWD after History
System Name: N/A CO 0121250
Compliance Samples: Yes ☒ No ☐
Send Results to CDPHE: Yes ☐ No ☒
Task Number (Lab Use Only) CAL Task No. 191017013
JML

B-Dawson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	~~Ch~~ Page 2 of 3
10/16/19	9:10	#1	1																											
↓	9:11	#2	3																							X				
	9:17	#3	2																								X		X	
	9:15	#4	1							X																				
	9:27	#5	1											X																
	9:38	#6	1										X																	
	9:21	#7	2					X																						
	9:23	#8	1															X	X	X		X								X
	9:25	#9	1																						X					
↓	9:32	#10	2									X									X									

Instructions: No sample container received for chlorite. Per Stephanie - marked on COC in error. Please disregard.

Field Temp: 16.1°C
Field pH: 6.69

C/S Info:

Delivered Via: FedEx
C/S Charge ☒
Seals Present Yes ☐ No ☒
Headspace Yes ☐ No ☒
Temp. 4 °C /Ice Y
Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie S	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

Colorado Analytical LABORATORIES, INC.

Brighton Lab
240 South Main Street
Brighton, CO 80601

Lakewood Lab
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
Address: 5540 Tech Center Dr	Address:	Address:
City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd

CAL Task No. 191017013

JML

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:26	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:41	#16	1		X																		X						
		Field blank																											
		Trip blank																											

PHASE I, II, V Drinking Water Analyses (check analysis)

Subcontract Analyses

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/10/19				

9:10

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 191017013

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 191017013
Client PO:
Client Project: Owens

Date Received: 10/17/19
Date Reported: 11/11/19
Matrix: Water - Drinking

Lab Number	Customer Sample ID	Sample Date/Time	Test	Result	Method	Date Analyzed
191017013-01L	B Dawson	10/16/19 9:44 AM	Total Coliform	**Absent**	SM 9223	10/18/19
			E-Coli	**Absent**	SM 9223	10/18/19

Abbreviations/ References:

Absent = Coliform Not Detected
Present = Coliform Detected - Chlorination Recommended
Date Analyzed = Date Test Completed
SM = "Standard Methods for the Examination of Water and Wastewater"; APHA; 19th Edition; 1995

DATA APPROVED FOR RELEASE BY

Drinking Water Chain of Custody

1 | 2

Colorado Analytical Laboratories, Inc.

FVAWD after History

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO0121250
Address: 5540 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	JML
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	

B-Davidson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	~~Cyanide~~ Page 2 of 3
10/16/19	9:10	#1	1																							X				
↓	9:11	#2	3																								X		X	
↓	9:17	#3	2							X																				
↓	9:15	#4	1											X																
↓	9:27	#5	1										X																	
↓	9:38	#6	1					X																						
↓	9:21	#7	2															X	X	X		X								X
↓	9:23	#8	1																						X					
↓	9:25	#9	1																		X									
↓	9:32	#10	2									X																		

Instructions: No sample containers received for chlorite. Per Stephanie - marked on COC in error. Please disregard.

Field Temp: 16.1°C
Field pH: 6.69

C/S Info:

Delivered Via: FedEx

C/S Charge ☒

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie [signature]	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 1/2

Colorado Analytical LABORATORIES, INC.

Brighton Lab
240 South Main Street
Brighton, CO 80601

Lakewood Lab
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
Address: 5540 Tech Center Dr	Address:	Address:
City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd

CAL Task No. 191017013

JML

PHASE I, II, V Drinking Water Analyses (check analysis)

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Subcontract Analyses: Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:28	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:44	#16	1		X																		X						
		Field blank																											
		Trip blank																											

Instructions:

C/S Info:

Delivered Via: Client C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/10/19				

9:10

Colorado Department of Public Health and Environment

Inorganic Chemicals Certified Laboratory Report Form
WQCD - Drinking Water CAS
Submit Online at http://www.wqcdcompliance.com/login

Revised 4/13/2015

IOC

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)
Public Water System Information		**Certified Laboratory Information**
PWSID#:		Laboratory ID: CO 0015
System Name: Owens		Laboratory Name: Colorado Analytical Laboratory
Contact Person: Doug Schwenke	Phone #:	Contact Person: Customer Service Phone: 303-659-2313
Comments:	Do Samples Need to be Composited BY THE LAB? ☐	Comments:

Section III (Supplied or Completed by Public Water System)			
Sample Date: 10/16/19	Collector: Stephanie Schwe	Facility ID (On Schedule): BDawson	Sample Pt ID (On Schedule): **BDawson**

Section IV Inorganic Chemicals (Completed by Certified Laboratory)

Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
10/17/19	10/21/19	191017013-01A	Antimony	7740-36-0	EPA 200.8	0.006	0.001	**BDL**
10/17/19	10/21/19	191017013-01A	Arsenic	7440-38-2	EPA 200.8	0.01	0.001	**0.003**
10/17/19	10/21/19	191017013-01A	Barium	7440-39-3	EPA 200.8	2	0.001	**0.025**
10/17/19	10/21/19	191017013-01A	Beryllium	7440-41-7	EPA 200.8	0.004	0.001	**BDL**
10/17/19	10/21/19	191017013-01A	Cadmium	7440-43-9	EPA 200.8	0.005	0.001	**BDL**
10/17/19	10/21/19	191017013-01A	Chromium	7440-47-3	EPA 200.8	0.1	0.001	**0.001**
10/17/19	10/21/19	191017013-01A	Mercury	7439-97-6	EPA 200.8	0.002	0.0001	**BDL**
10/17/19	10/21/19	191017013-01A	Nickel	7440-02-0	EPA 200.8	N/A	0.001	**BDL**
10/17/19	10/21/19	191017013-01A	Selenium	7782-49-2	EPA 200.8	0.05	0.001	**0.004**
10/17/19	10/23/19	191017013-01A	Sodium	7440-23-5	EPA 200.7	N/A	0.1	**11.4**
10/17/19	10/21/19	191017013-01A	Thallium	7440-28-0	EPA 200.8	0.002	0.001	**BDL**

NT: Not Tested
Lab MRL: Laboratory Minimum Reporting Level
BDL: Below Laboratory MRL. A less than (<) may also used.

mg/L: Milligrams per Liter
MCL: Maximum Contaminant Level

11/11/19
191017013-01A
1/ 1
N

Drinking Water Chain of Custody

1/2

Colorado Analytical Laboratories, Inc.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A FVAWD after History
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO 0121250
Address: 5540 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		JML
Sample Collector Phone: 719-321-5341	PO Number:	

B-Davidson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Ch[illegible] (Page 2 of 3)
10/16/19	9:10	#1	1																											
↓	9:11	#2	3																							X				
↓	9:17	#3	2																								X		X	
↓	9:15	#4	1							X																				
↓	9:27	#5	1											X																
↓	9:38	#6	1										X																	
↓	9:21	#7	2					X																						
↓	9:23	#8	1															X	X	X		X								X
↓	9:25	#9	1																						X					
↓	9:32	#10	2									X									X									

Instructions: No sample containers received for chlorite. Per Stephanie - marked [illegible] [illegible] please disregard.

Field Temp: 16.1°C
Field pH: 6.69

C/S Info:

Delivered Via: FedEx

C/S Charge ☒

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie [signature]	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 of 2

Colorado Analytical LABORATORIES, INC.

Brighton Lab
240 South Main Street
Brighton, CO 80601

Lakewood Lab
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
Address: 5540 Tech Center Dr	Address:	Address:
City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd JML

CAL Task No. 191017013

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:26	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:46	#16	1		X																		X						
		Field blank																											
		Trip blank																											

PHASE I, II, V Drinking Water Analyses (check analysis)

Subcontract Analyses

Page 3 of 3

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/11/19				

9:10

Colorado Department of Public Health and Environment

Organic Chemicals Certified Laboratory Report Form
WQCD - Drinking Water CAS
Submit Online at http://www.wqcdcompliance.com/login

Revised 4/13/2015

VOC/SOC

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)
Public Water System Information		**Certified Laboratory Information**
PWSID#:		Laboratory ID: CO 00063
System Name: Owens		Laboratory Name: Colorado Analytical Laboratory
Contact Person: Doug Schwenke	Phone #: 719-227-0072	Contact Person: Customer Service Phone: 303-659-2313
Comments:	Do Samples Need to be Composited BY THE LAB? ☐	Comments:

PWSID:		Section III (Supplied or Completed by Public Water System)					
Sample Date:	10/16/19	Collector:	Stephanie Schwenk	Facility ID (On Schedule):	BDawson	Sample Pt ID (On Schedule):	**BDawson**

Section IV Volatile Organic Chemicals (Supplied or Completed by Certified Laboratory)

Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (ug/L)	Lab MRL (ug/L)	Result (ug/L)
10/17/19	10/19/19	191017013-01G	1,1,1-Trichloroethane	71-55-6	EPA-524.2	200	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	1,1,2-Trichloroethane	79-00-5	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	1,1-Dichloroethylene	75-35-4	EPA-524.2	7	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	1,2,4-Trichlorobenzene	120-82-1	EPA-524.2	70	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	1,2-Dichloroethane	107-06-2	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	1,2-Dichloropropane	78-87-5	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Benzene	71-43-2	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Carbon Tetrachloride	56-23-5	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Monochlorobenzene	108-90-7	EPA-524.2	100	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	cis-1,2-Dichloroethylene	156-59-2	EPA-524.2	70	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Dichloromethane	75-09-2	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Ethylbenzene	100-41-4	EPA-524.2	700	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	o-Dichlorobenzene	95-50-1	EPA-524.2	600	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Para-Dichlorobenzene	106-46-7	EPA-524.2	75	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Styrene	100-42-5	EPA-524.2	100	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Tetrachloroethylene	127-18-4	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Toluene	108-88-3	EPA-524.2	1000	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	trans-1,2-Dichloroethylene	156-60-5	EPA-524.2	100	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Trichloroethylene	79-01-6	EPA-524.2	5	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Vinyl chloride	75-01-4	EPA-524.2	2	0.5	**BDL**
10/17/19	10/19/19	191017013-01G	Xylenes (total)	1330-20-7	EPA-524.2	10000	0.5	**BDL**

NT: Not Tested ug/L: Micrograms per Liter MCL: Maximum Contaminant Level BDL Below Laboratory MRL A less than sign (<) may also be used.

191017013-01 N 1/2
11/11/19

PWSID#:		Section V (Supplied or Completed by Public Water System)							
Sample Date:	10/16/19	Collector:	Stephanie Schwenk	Facility ID (On Schedule):	BDawson	Sample Pt ID (On Schedule):	**BDawson**		
Section VI Synthetic Organic Chemicals (Supplied or Completed by Certified Laboratory)									
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (ug/L)	Lab MRL (ug/L)	Result (ug/L)	
10/17/19	10/18/19	191017013-01D	Dibromochloropropane	96-12-8	EPA 504.1	0.2	0.02	**BDL**	
10/17/19	10/25/19	191017013-01F	2,4,-D	94-75-7	EPA 515.4	70	0.1	**BDL**	
10/17/19	10/25/19	191017013-01F	2,4,5-TP	93-72-1	EPA 515.4	50	0.2	**BDL**	
10/17/19	10/25/19	191017013-01H	Alachlor	15972-60-8	EPA 525.2	2	0.2	**BDL**	
10/17/19	11/4/19	191017013-01I	Aldicarb	116-06-3	EPA 531.1	N/A	0.6	**BDL**	
10/17/19	11/4/19	191017013-01I	Aldicarb sulfone	1646-88-4	EPA 531.1	N/A	1	**BDL**	
10/17/19	11/4/19	191017013-01I	Aldicarb sulfoxide	1646-87-3	EPA 531.1	N/A	0.7	**BDL**	
10/17/19	10/25/19	191017013-01H	Atrazine	1912-24-9	EPA 525.2	3	0.1	**BDL**	
10/17/19	10/25/19	191017013-01H	Benzo(a)pyrene	50-32-8	EPA 525.2	0.2	0.02	**BDL**	
10/17/19	11/4/19	191017013-01I	Carbofuran	1563-66-2	EPA 531.1	40	0.9	**BDL**	
10/17/19	10/18/19	191017013-01E	Chlordane	57-74-9	EPA 505	2	0.2	**BDL**	
10/17/19	10/25/19	191017013-01F	Dalapon	75-99-0	EPA 515.4	200	1	**BDL**	
10/17/19	10/25/19	191017013-01H	Di(2-ethylhexyl)adipate	103-23-1	EPA 525.2	400	0.6	**BDL**	
10/17/19	10/25/19	191017013-01H	Di(2-ethylhexyl)phthalate	117-81-7	EPA 525.2	6	0.6	**BDL**	
10/17/19	10/25/19	191017013-01F	Dinoseb	85-85-7	EPA 515.4	7	0.2	**BDL**	
10/17/19	10/18/19	191017013-01K	Diquat	85-00-7	EPA 549.2	20	0.4	**BDL**	
10/17/19	10/23/19	191017013-01J	Endothall	145-73-3	EPA 548.1	100	9	**BDL**	
10/17/19	10/18/19	191017013-01E	Endrin	72-20-8	EPA 505	2	0.01	**BDL**	
10/17/19	10/18/19	191017013-01D	Ethylene dibromide	106-93-4	EPA 504.1	0.05	0.01	**BDL**	
10/17/19	10/28/19	191017013-01M	Glyphosate	1071-83-6	EPA 547	700	6	**BDL**	
10/17/19	10/25/19	191017013-01H	Heptachlor	76-44-8	EPA 525.2	0.4	0.04	**BDL**	
10/17/19	10/18/19	191017013-01E	Heptachlor epoxide	1024-57-3	EPA 505	0.2	0.02	**BDL**	
10/17/19	10/18/19	191017013-01E	Hexachlorobenzene	118-74-1	EPA 505	1	0.1	**BDL**	
10/17/19	10/18/19	191017013-01E	Hexachlorocyclopentadiene	77-47-4	EPA 505	50	0.1	**BDL**	
10/17/19	10/18/19	191017013-01E	Lindane	58-89-9	EPA 505	0.2	0.02	**BDL**	
10/17/19	10/18/19	191017013-01E	Methoxychlor	72-43-5	EPA 505	40	0.1	**BDL**	
10/17/19	11/4/19	191017013-01I	Oxamyl	23135-22-0	EPA 531.1	200	1	**BDL**	
10/17/19	10/25/19	191017013-01F	Pentachlorophenol	87-86-5	EPA 515.4	1	0.04	**BDL**	
10/17/19	10/25/19	191017013-01F	Picloram	1918-02-1	EPA 515.4	500	0.1	**BDL**	
10/17/19	10/18/19	191017013-01E	Polychlorinated biphenyl's	1336-36-3	EPA 505	0.5	0.1	**BDL**	
10/17/19	10/25/19	191017013-01H	Simazine	122-34-9	EPA 525.2	4	0.07	**BDL**	
10/17/19	10/18/19	191017013-01E	Toxaphene	8001-35-2	EPA 505	3	1	**BDL**	

NT: Not Tested ug/L: Micrograms per Liter MCL: Maximum Contaminant Level BDL Below Laboratory MRL A less than sign (<) may also be used.

Drinking Water Chain of Custody

1/2

Colorado Analytical LABORATORIES, INC.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A FVAWD after History
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO0121250
Address: 5540 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	JML

B-Davidson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	~~C~~
10/16/19	9:10	#1	1																							X				
	9:11	#2	3																								X		X	
	9:17	#3	2							X																				
	9:15	#4	1											X																
	9:27	#5	1										X																	
	9:38	#6	1					X																						
	9:21	#7	2															X	X	X		X								X
	9:23	#8	1																						X					
	9:25	#9	1																		X									
↓	9:32	#10	2									X																		

Instructions: No sample container received for chlorite. Per Stephanie - marked on CoC in error. Please disregard.

Field Temp: 16.1°C
Field pH = 6.69

C/S Info:

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Delivered Via: FedEx C/S Charge ☒ Temp. 4 °C /Ice ✓ Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie S. [signature]	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 | 2

Colorado Analytical LABORATORIES, INC.

Brighton Lab
240 South Main Street
Brighton, CO 80601

Lakewood Lab
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
Address: 5540 Tech Center Dr	Address:	Address:
City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd JML

CAL Task No. 191017013

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/16	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:26	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:46	#16	1		X																		X						
		Field blank																											
		Trip blank																											

PHASE I, II, V Drinking Water Analyses (check analysis) | Subcontract Analyses

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/16/19				

9:40

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 191017013

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 191017013
Client PO:
Client Project: Owens

Date Received: 10/17/19
Date Reported: 11/11/19
Matrix: Water - Drinking

Customer Sample ID B Dawson
Sample Date/Time: 10/16/19 9:44 AM
Lab Number: 191017013-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Bicarbonate	**59.3 mg/L as CaCO3**	SM 2320-B	0.1	10/18/19	ERL
Calcium as CaCO3	**34.5 mg/L**	EPA 200.7	0.1	10/23/19	MBN
Carbonate	**< 0.1 mg/L as CaCO3**	SM 2320-B	0.1	10/18/19	ERL
Hydroxide	**< 0.1 mg/L as CaCO3**	SM 2320-B	0.1	10/18/19	ERL
Langelier Index	**-1.58 units**	SM 2330-B		10/25/19	SAN
pH	**6.89 units**	SM 4500-H-B	0.01	10/17/19	MBN
Temperature	**20 °C**	SM 4500-H-B	1	10/17/19	MBN
Total Alkalinity	**59.3 mg/L as CaCO3**	SM 2320-B	0.1	10/18/19	ERL
Total Dissolved Solids	**154 mg/L**	SM 2540-C	5	10/22/19	ISG

Abbreviations/ References:

ML = Minimum Level = LRL = RL
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

DATA APPROVED FOR RELEASE BY

Drinking Water Chain of Custody

Colorado Analytical Laboratories, Inc.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A FVAWD per History
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO 0121250
Address: 5540 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	JML

B-Dawson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	[illegible]
10/16/19	9:10	#1	1																							X				
↓	9:11	#2	3																								X		X	
	9:17	#3	2							X																				
	9:15	#4	1											X																
	9:27	#5	1										X																	
	9:35	#6	1					X																						
	9:21	#7	2															X	X	X		X								X
	9:23	#8	1																						X					
	9:25	#9	1																		X									
↓	9:32	#10	2								X																			

Instructions: No sample container received for chlorite. Per Stephanie - mailed on ... in error. Please disregard.

Field Temp: 16.1°C
Field pH = 6.69

C/S Info:

Delivered Via: FedEx

C/S Charge ☒

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice ✓ Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie S.	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 1/2

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Lakewood Lab
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Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
Address: 5540 Tech Center Dr	Address:	Address:
City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd JML

CAL Task No. 191017013

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:46	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:41	#16	1		X																		X						
		Field blank																											
		Trip blank																											

PHASE I, II, V Drinking Water Analyses (check analysis) | Subcontract Analyses

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/10/19				

9:10

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 191017013

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 191017013
Client PO:
Client Project: Owens

Date Received: 10/17/19
Date Reported: 11/11/19
Matrix: Water - Drinking

Customer Sample ID B Dawson
Sample Date/Time: 10/16/19 9:44 AM
Lab Number: 191017013-01

Test	Result	Method	ML	Date Analyzed	Analyzed By	MCL
Cyanide-Free	**< 0.005 mg/L**	EPA 335.4	0.005 mg/L	10/28/19	CES	
Total Organic Carbon	**< 0.5 mg/L**	SM 5310-C	0.5 mg/L	10/19/19	ISG	
Total						
Calcium	**14.3 mg/L**	EPA 200.7	0.1 mg/L	10/23/19	MBN	
Iron	**1.293 mg/L**	EPA 200.7	0.005 mg/L	10/23/19	MBN	0.3
Magnesium	**2.72 mg/L**	EPA 200.7	0.02 mg/L	10/23/19	MBN	
Potassium	**1.0 mg/L**	EPA 200.7	0.1 mg/L	10/23/19	MBN	
Copper	**0.1706 mg/L**	EPA 200.8	0.0008 mg/L	10/22/19	IPC	1.3
Lead	**0.0130 mg/L**	EPA 200.8	0.0001 mg/L	10/22/19	IPC	0.015
Manganese	**0.0092 mg/L**	EPA 200.8	0.0008 mg/L	10/22/19	IPC	0.05
Strontium	**0.109 mg/L**	EPA 200.8	0.005 mg/L	10/22/19	IPC	
Uranium	**0.0003 mg/L**	EPA 200.8	0.0002 mg/L	10/22/19	IPC	0.03
Total Hardness	**46.8 mg/L as CaCO3**	SM 2340-B	0.1 mg/L as CaCO3	10/23/19	MBN	

Abbreviations/ References:

ML = Minimum Level = LRL = RL
MCL = Maximum Contaminant Level per The EPA
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

DATA APPROVED FOR RELEASE BY

Drinking Water Chain of Custody

1/2

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12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A FVAWD after History
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO 0121250
Address: 5840 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	JML

B-Dawson

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	~~Chrome~~ Page 2 of 3
10/16/19	9:10	#1	1																							X				
↓	9:11	#2	3																								X		X	
	9:17	#3	2							X																				
	9:15	#4	1											X																
	9:27	#5	1										X																	
	9:38	#6	1					X																						
	9:21	#7	2															X	X	X		X								X
	9:03	#8	1																						X					
	9:25	#9	1																		X									
↓	9:32	#10	2									X																		

PHASE I, II, V Drinking Water Analyses (check requested analysis) — Subcontract Analyses

Instructions: No sample container received for chlorite. Per Stephanie - marked on COC in error. Please disregard.

Field Temp: 16.1°C
Field pH: 6.69

C/S Info:

Delivered Via: FedEx

C/S Charge ☒

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie [signature]	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 | 2

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Brighton, CO 80601

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Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
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City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd JML

CAL Task No. 191017013

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	PHASE I, II, V Drinking Water Analyses (check analysis): Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Subcontract Analyses: Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:26	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:44	#16	1		X																		X						
		Field blank																											
		Trip blank																											

Page 3 of 3

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/10/19				

9:10

Colorado Department of Public Health and Environment

Nitrate and Nitrite as Nitrogen Certified Laboratory Report Form
WQCD - Drinking Water CAS
Submit Online at http://www.wqcdcompliance.com/login

Revised 4/13/2015

NOX

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)	
Public Water System Information		**Certified Laboratory Information**	
PWSID#:		Laboratory ID: CO 0015	
System Name: Owens		Laboratory Name: Colorado Analytical Laboratory	
Contact Person: Doug Schwenke	Phone #: 719-227-0072	Contact Person: Customer Service	Phone: 303-659-2313
Comments:		Comments:	

Section III (Supplied or Completed by Public Water System)					Section IV (Supplied or Completed by Certified Laboratory)							
Sample Date	Collector	Facility ID On Schedule	Sample Pt ID On Schedule	Confirmation?	Lab Receipt Date	Lab Analysis Date	Laboratory Sample ID #	Analyte	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
10/16/19	tephanie Schwenk	Dawson Well	Dawson Well	☐	10/17/19	10/17/19	191017013-01	Nitrate Nitrogen	EPA 300.0	10	0.1	**0.5**
10/16/19	tephanie Schwenk	Dawson Well	Dawson Well	☐	10/17/19	10/17/19	191017013-01	Nitrite Nitrogen	EPA 300.0	1	0.1	**BDL**

NT: Not Tested
Lab MRL: Laboratory Minimum Reporting Level
BDL: Below Laboratory MRL. A less than (<) may also used.

mg/L: Milligrams per Liter
MCL: Maximum Contaminant Level

11/11/19
191017013-01
1/ 1
N

Drinking Water Chain of Custody

1|2

Colorado Analytical Laboratories, Inc.

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Commerce City CO 80640

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Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A FVAWD after History
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A CO 0121250
Address: 5540 Tech Center Dr	Address:	Compliance Samples: Yes ☒ No ☐
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Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task No. 191017013
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	JML

B-Dawson

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	~~Ch~~ Page 2 of 3
10/16/19	9:10	#1	1																											
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	9:27	#5	1											X																
	9:38	#6	1										X																	
	9:21	#7	2					X																						
	9:23	#8	1															X	X	X		X								X
	9:25	#9	1																						X					
↓	9:32	#10	2									X									X									

Instructions: No sample container received for chlorite. Per Stephanie - marked on COC in error. Please disregard.

Field Temp: 16.1°C
Field pH = 6.69

C/S Info:

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Delivered Via: FedEx C/S Charge ☒ Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie S.	10/16/19 noon	[signature]	10/17/19 9:40				

Drinking Water Chain of Custody

2 1/2

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Brighton Lab
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Brighton, CO 80601

Lakewood Lab
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Lakewood CO 80228

Phone: 303-659-2313
Fax: 303-659-2315

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Report To Information	Bill To Information (If different from report to)	State Form / Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name: N/A
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City CS State CO Zip 80919	City State Zip	City State Zip
Phone: 719-227-0072 Fax:	Phone: Fax:	County: El Paso
Email: dschwenke@jdshydro.com	Email:	Compliance Samples: Yes ☒ No ☐
Sampler Name: Stephanie Schwenke	PO No.:	Send Forms to State: Yes ☐ No ☒

Task Number B-Dawd JML

CAL Task No. 191017013

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
10/10	9:39	#11	3				X																						
	9:36	#12	3			X																							
	9:26	#13	2								X																		
	9:40	#14	3						X																				
	9:43	#15	2																										
	9:46	#16	1		X																		X						
		Field blank																											
		Trip blank																											

PHASE I, II, V Drinking Water Analyses (check analysis) | Subcontract Analyses

Instructions:

C/S Info:

Delivered Via: Fed Ex C/S Charge ☐

Seals Present Yes ☐ No ☒ Headspace Yes ☐ No ☒

Temp. 4 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
			10/10/19 9:10				

Colorado Department of Public Health and Environment

Radionuclides Certified Laboratory Report Form

WQCD – Drinking Water CAS
4300 Cherry Creek Drive South; Denver, CO 80246-1530
Fax: (303) 758-1398; cdphe.drinkingwater@state.co.us

Revision 6/13/2014

RAD

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)	
Public Water System Information		**Certified Laboratory Information**	
PWS ID: CO0121250		Laboratory ID: CO 00008	
System Name: FVAWD		Laboratory Name: Hazen Research, Inc.	
Contact Person:	Phone #:	Contact Person: Jessica Axen	Phone #: 303-279-4501
Comments: B Dawson	Do Samples Need to be Composited BY THE LAB? ☐	Comments:	

Section III (Supplied or Completed by Public Water System)			
Sample Date: 10/16/2019	Collector: Stephanie Shwenke	Facility ID (On Schedule):	Sample Pt ID (On Schedule):

Section IV Radionuclides (Supplied or Completed by Certified Laboratory)

Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name (Code)	CAS No.	Analytical Method	MCL	Lab MRL	Result
10/18/2019	11/04/2019	19M03135-001	Gross Alpha Including Uranium (4002)	12587-46-1	SM 7110 B	N/A	0.1	0.9(±1.4)
			Combined Uranium (4006)	7440-61-1		30 ug/L		
10/18/2019	11/20/2019	19M03135-001	Radium -226 (4020)	13982-63-3	SM 7500-Ra B	N/A	0.2	0.6(±0.3)
10/18/2019	12/03/2019	19M03135-001	Radium -228 (4030)	15262-20-1	EPA Ra-05	N/A	0.3	0.7(±0.8)
10/18/2019	11/04/2019	19M03135-001	Gross Beta (4100)	12587-47-2	SM 7110 B	50 pCi/L*	3.7	<3.7(±2.3)
			Total Dissolved Solids (1930)			N/A		

*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern.

Section V Calculated Values

N/A	Gross Alpha Excluding Uranium (4000)	Calculated Value	15 pCi/L	N/A	
	Combined Radium {-226 & -228} (4010)	Calculated Value	5 pCi/L	N/A	

NT: Not Tested
Lab MRL: Laboratory Minimum Reporting Level
BDL: Below Laboratory MRL. A less than sign (<) may also be used

ug/L: Micrograms per Liter
pCi/L: Picocuries per Liter
MCL: Maximum Contaminant Level

Drinking Water Chain of Custody

19M03135

Colorado Analytical LABORATORIES, INC.

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: Colorado Analytical Labs	Company Name: Same	PWSID: CO011250
Contact Name: Stuart Nielson	Contact Name:	System Name: FVAWD
Address: 10411 Heinz Way	Address:	Compliance Samples: Yes ☒ No ☐
City: Commerce City State: CO Zip: 80640	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☒
Phone:303-659-2313	Phone:	Task Number (Lab Use Only) CAL Task No. 191017015
Email:stuartnielson@coloradolab.com	Email:	
Sample Collector: Stephanie Schwenke		JML
Sample Collector Phone:	PO Number:	

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

PHASE I, II, V Drinking Water Analyses (check requested analysis) / Subcontract Analyses

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk/Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)		Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chlorite
10/16/19	0911	191017015-01 B Dawson	4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐
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		Send to Hazen via Fedex SD			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Instructions: Please put on state form but do not report to the state. Thanks!

3.0

C/S Info:

Delivered Via: C/S Charge ☐

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐

Temp. °C /Ice Sample Pres. Yes ☒ No ☐ AG

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Adams	10/18/19 1000	[signature]	10-18-19 1400				