



State of Idaho

DEPARTMENT OF WATER RESOURCES

Eastern Region, 900 North Skyline Drive, Suite A • Idaho Falls, Idaho 83402-1718

Phone: (208) 525-7161 • Fax: (208) 525-7177 • Web Site: www.idwr.idaho.gov

January 11, 2011

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

BIRCH CREEK RANCHES LLC
5203 S 11TH E
IDAHO FALLS ID 83404

RE: Applications for Transfer No.: 72493 / 72494
Withdrawal of Applications

Dear Applicant(s):

The Department of Water Resources acknowledges receipt of your withdrawal of the applications for transfer referenced above. The withdrawal removes your applications from any further consideration or action by the Department.

A refund request for your filing fee has been submitted to our State Office in Boise.

Please feel free to contact this office if you have any questions regarding this matter.

Sincerely,

James Cefalo
Water Resources Program Manager

JC:sc

Cox, Sharla

From: Cox, Sharla
Sent: Tuesday, January 11, 2011 2:22 PM
To: Marston, Sascha
Subject: Refund Please

Sascha, please refund the following:

Receipt #E031500
Amount \$820.00
Payable to: Reno Ditch
5203 S 11th East
Idaho Falls ID 83404

Reason: Withdrew applications for transfer 72493 and 72494

Thank you.

Sharla

Sharla Cox
Administrative Assistant
Idaho Department of Water Resources
900 N. Skyline Dr. Ste. A
Idaho Falls ID 83402
208-525-7161 - telephone
208-525-7177 - fax
sharla.cox@idwr.idaho.gov

RECEIVED

JAN 10 2011

Department of Water Resources
Eastern Region

BIRCH CREEK RANCHES, L.L.C.

5203 SOUTH 11TH EAST

IDAHO FALLS, IDAHO 83404

208-522-8069 FAX 208-522-8223

E-mail: ted@tsorenson.net

MEMORANDUM

TO: James Cefalo DATE: 1/7/2011
Water Resources Program Manager
IDWR
500 North Skyline Drive, Suite A
FROM: Ted Sorenson Idaho Falls, Idaho
SUBJECT: Transfer 72953 & 72954 83404

REMARKS:

Please send refund check
per attached withdrawal

Thank You

SIGNED: Ted Sorenson

cc: _____

RECEIVED

JAN 10 2011

Department of Water Resources
Eastern Region

WITHDRAWAL OF APPLICATION FOR TRANSFER OF WATER RIGHT(S)

I/We, Ted Sorenson and _____,
(Applicant's Printed Name) (Applicant's Printed Name)
 on behalf of Birch Creek Ranches, L LaVar Newman, and Reno Ditch Company
 _____ and _____,
(Applicant's Printed Name) (Applicant's Printed Name)
 hereby withdraw our Application for Transfer No. 72493 and 72494 of Water Right
 No(s). 32-7025, 32-10127, 32-2100, and 32-10154

Signed this 6 day of January, 20 2011 ^{TSJ}


(Signature/Title of Applicant)

(Signature/Title of Applicant)

(Signature/Title of Applicant)

(Signature/Title of Applicant)

★ Request refund on
 receipt E031500

Payable to: Reno Ditch Co.
 \$820⁰⁰



State of Idaho

DEPARTMENT OF WATER RESOURCES

Eastern Region, 900 North Skyline Drive, Suite A • Idaho Falls, Idaho 83402-1718

Phone: (208) 525-7161 • Fax: (208) 525-7177 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

December 8, 2010

Ted Sorenson
Reno Ditch Company
5203 South 11th East
Idaho Falls, ID 83404

Re: Transfer Applications 72493 and 72494

Dear Mr. Sorenson,

On December 15, 2005, you filed two applications for transfer seeking to add points of diversion to a number of ground water rights (32-7025, 32-10127, 32-2100, and 32-10154). The new ground water wells would discharge water into Birch Creek. The water would then be conveyed through the Reno Ditch system. Shortly after the applications were filed, you asked the department to hold-off on processing the transfers to allow time to conduct pump tests to determine whether water was available at the proposed sites and the extent of impacts to local ground water wells. An initial study completed by Brockway Engineering states that local ground water wells could be impacted.

Because the transfers had been pending before the department for four years, in fall 2009 Dave Carlson asked you to withdraw the transfers and re-file them when you were prepared to move forward with the project. In a letter dated January 19, 2010, you requested one more year to complete the pump tests. It appears that the pump tests were not performed in 2010 as anticipated.

We are again asking you to consider withdrawing the transfers until you are in a position to actively pursue their approval. Because the transfers were never advertised, you are entitled to a refund of the \$820.00 filing fee. A refund will be issued upon receipt of the withdrawal forms. If we do not receive a signed withdrawal within 30 days, we will take steps to officially reject the transfers without prejudice based on the fact that the mitigation plan is incomplete. Thank you for your cooperation in this matter.

Sincerely,

James Cefalo
Water Resources Program Manager
IDWR – Eastern Region

Encl: Withdrawal of Transfer Form

RENO DITCH COMPANY

5203 South 11th East
Idaho Falls, Idaho 83404

Phone: (208) 522-8069
Fax: (208) 522-8223
e-mail: ted@tsorenson.net

RECEIVED

JAN 20 2010

Department of Water Resources
Eastern Region

January 19, 2010

Dave Carlson
Eastern Region
Idaho Department of Water Resources
900 North Skyline Drive, Suite A
Idaho Falls ID 83402-1718

Re: Application for Transfer Nos. 72493 and 72494.

Dear Mr. Carlson:

We are in receipt of this withdrawal, however at our annual meeting in January we decided we would like to wait another year to see if we could test pump the well that we drilled near Scull Canyon to see if any water has shown up. Therefore, we would like not to cancel these transfers at this time. Trusting this to be of value.

Very truly yours,



Ted S. Sorenson,
Vice President
Reno Ditch Company

cc: Lavar Newman

TSS/ptj

Project No. 225-08-2006

**Evaluation of Mitigation Alternatives
Birch Creek Ranch & L. La Var Newman
Transfer No. 72493 & 72494**

Prepared for:
Ted Sorenson



For information concerning this report, contact
Jason C. Helms, P.E.



BROCKWAY
ENGINEERING
P.L.L.C.

CHARLES E. BROCKWAY, PH.D., P.E.
CHARLES G. BROCKWAY, PH.D., P.E.
JASON C. HELMS, P.E.

2016 NORTH WASHINGTON, SUITE 4
TWIN FALLS, IDAHO 83301

Table of Contents

A.	Introduction.....	1
B.	Objective.....	4
B.1.	Existing Local Water Rights (Birch Creek)	5
B.2.	Existing Local Water Rights (Ground Water).....	6
C.	Method of Analysis	7
C.1.	Regional Impact Analysis	8
C.2.	Local Impact Analysis	9
C.2.1.	Ground Water Model Development.....	10
C.2.2.	Boundary Conditions	11
C.2.3.	Model Inflow / Outflow	12
C.2.4.	Model Diversions.....	12
D.	Mitigation Requirements.....	14
D.1.	Regional ESPA Impacts & Mitigation.....	15
D.2.	Local Impacts & Mitigation	15
D.2.1.	Ground Water Impacts	10
D.2.2.	Birch Creek Impacts	10
E.	Mitigation Reduction Alternatives.....	20
F.	Conclusions & Recommendations	25

List of Figures

FIGURE 1 Map – ESPA Overview	1
FIGURE 2. Map – Local Details	1

List of Tables & Charts

Table 1 – Birch Creek Calculated Transient Tributary Reductions	1
Chart 1 – Birch Creek Calculated Transient Tributary Reductions	2
Table 2 – ESPA Transfer Spreadsheet Data Entry	5
Chart 2 – ESPA Calculated Reach Impacts.....	2
Chart 2.1 – Net Change Above Milner	13
Chart 2.2 – Hydrologic Response (Ashton to Rexburg)	13
Chart 2.3 – Hydrologic Response (Heise to Shelley)	13
Chart 2.4 – Hydrologic Response (Shelley to Near Blackfoot).....	13
Chart 2.5 – Hydrologic Response (Near Blackfoot to Neeley)	13
Chart 2.6 – Hydrologic Response (Neeley to Minidoka)	13
Chart 2.7 – % Change Above Milner	13
Chart 2.8 – Net Change Below Milner	13
Chart 2.9 – Hydrologic Response (Devil's Washbowl to Buhl).....	13
Chart 2.10 – Hydrologic Response (Buhl to Thousand Springs)	13
Chart 2.11 – Hydrologic Response (Thousand Springs complex)	13
Chart 2.12 – Hydrologic Response (Thousand Springs to Malad).....	13
Chart 2.13 – Hydrologic Response (Malad)	13
Chart 2.14 – Hydrologic Response (Malad to Bancroft Spring)	13
Chart 2.15 – % Change Below Milner	13

Evaluation of Mitigation Alternatives Birch Creek Ranch & L. LaVar Newman Water Right Transfers # 72493 & 72494

Brockway Engineering, PLLC
August 18, 2006

A. Introduction

Birch Creek Ranches and L. LaVar Newman (applicants) submitted joint applications for transfer to the Idaho Department of Water Resources on December 15, 2005. The applications seek to authorize diversion of existing groundwater rights from several proposed new wells near Blue Dome located in the Birch Creek Drainage approximately 15 miles northwest of the current points of diversion. The approval of the transfer will provide reduced pumping costs and will allow the water to travel through the Birch Power system then back through the Reno ditch where it will be utilized at the current place of use.

At the request of the Idaho Department of Water Resources (IDWR), potential impacts to existing water uses have been evaluated to facilitate development of an acceptable mitigation plan. The specific impacts addressed in this study include:

- Regional ESPA ground water impacts to the Snake River.
- Localized ground water impacts in the Blue Dome area.
- Localized impacts to surface water flow in Birch Creek.

B. Objective

The objective of any mitigation plan is to reduce additional impacts to other water users resulting from the changes proposed in the transfer to some acceptable level. In the case of the Eastern Snake Plain Aquifer (ESPA), when a transfer proposes to change the location of diversions within the ESPA, the current standard for acceptable mitigation is no more than 5% additional reach depletion to any hydraulically connected reach of the Snake River. This standard will be used for modeled impacts to the ESPA resulting from the transfer, however mitigation of localized impacts near Blue Dome will likely require additional discussion and negotiation with affected users to develop a plan that is acceptable..

C. Method of Analysis

C.1. Regional Impacts Analysis

An evaluation of ESPA impacts was performed utilizing the IDWR Ground Water Transfer Spreadsheet V2.1 which is the most current version of the ESPA ground water model developed by the Idaho Water Resources Research Institute. The ESPA transfer spreadsheet analysis is required for transfers proposing to move diversion locations within the ESPA. In this case however, the transfer is actually removing the diversions from the active ESPA model grid into the Birch Creek drainage. The Birch Creek drainage is tributary to the ESPA so the ultimate effect of the change in diversion location will be transient reduction in tributary underflow in the model cells where Birch Creek drainage intersects the ESPA active model grid. Determination of the net fractional change in tributary underflow at the Birch Creek Valley – ESPA boundary due to the effects of additional diversion from the Blue Dome area was calculated utilizing a

project specific ground water model of the Birch Creek Valley extending from the narrows within Township 10N, Range 29E, Section 13 down to the ESPA boundary within Township 8N, Range 31E, Section 33. The model details are more fully discussed below in Section C.2.

The "FROM" wells are associated with ground water irrigation rights proposed for transfer which are currently diverted from several wells located along the northern boundary of the ESPA. The "TO" well location - for purposes of the ESPA model - is located at the first active model cell associated with the Birch Creek Tributary underflow. An overview of the spatial transfer details are shown on **Figure 1**. Node (25,153) was used to simulate historical withdrawals associated with Newman water rights 32-2100 and 32-10154. Node (25,154) was used for simulated historical withdrawals associated with Birch Creek Ranch water rights 32-7025 and 32-10127. Since no change in nature of use is proposed, the full authorized diversion volume was included in the simulation. As mentioned previously, in order to properly simulate the delayed impacts due to the proposed diversion location outside the active ESPA model grid, the fractional change in the tributary underflow was factored into the annual diversions modeled for the "TO" well.

C.2. Local Impact Analysis

C.2.1. Model Development

To evaluate the localized and tributary underflow impacts of the proposed transfer, a ground water model was developed using the GMS 4.0 graphical interface with the MODFLOW 2000 underlying code. The general hydrogeologic setting is assumed to be alluvium bounded by relatively impermeable bedrock typical of adjacent basins such as Little Lost River and Big Lost River. Very few well drilling records are available in the

area of the proposed diversion in the valley are virtually nonexistent, and those that do exist (3 or 4) provide little information and are highly inconsistent. Where no data exists, best engineering judgment was employed as to aquifer parameters, extent, etc.

The model boundary chosen extends from the narrows within Township 10N, Range 29E, Section 13 - approximately 3 miles above Blue Dome - southeast to the ESPA boundary within Township 8N, Range 31E, Section 33. A map showing the location and extent of the additional ground water model relative to the ESPA is attached as **Figure 2**. Aquifer limits at the sides of the valley were estimated based on ground topography. The model grid was created within this domain, using a 300-meter uniform cell size. Unconfined conditions are assumed to prevail. Hydraulic conductivity was estimated to be 38 m/d (125 ft/d) based on material indicated by the limited drilling record information. The storage coefficient (specific yield) was estimated to be 0.15 which is typical of an unconfined system of this type.

The aquifer bottom elevation varied from 1860 m at the upper end down to 1430 m at the lower end of the valley. Bottom elevations from Eightmile Creek southward were based on existing seismic investigations.^{1 2 3 4} The aquifer cross-section was

¹ Liberty, Lee M. , Barrash, Warren , Knoll, Michael D. , Hudson, William K. , and Bolger, R. D. , Geophysical investigations of Birch Creek Valley near the northern boundary of the INEEL--Year 1 report, report prepared for the Idaho Water Resources Research Institute (University of Idaho, Moscow, ID), Technical Report BSU CGISS 96-06, Boise State University, Boise, ID, 20 pp., 1997.

² U.S. Department of Energy-Idaho Operations Office, 2005, *Operable Unit 10-08 Summary Report on the Subregional-scale Two-dimensional Aquifer Model*, ICP/EXT-05-00979, Revision 1 - Project No. 23368.

³ Liberty, Lee M. , Barrash, Warren , Knoll, Michael D. , Bolger, R. D. , and Hudson, William K. , Geophysical modeling of southern Birch Creek valley adjacent to the eastern Snake River Plain, Idaho: implications for groundwater flow, Annual Meeting of the Geological Society of America (20-23 October 1997), Salt Lake City, UT, *Abstracts with Programs* , v. 29, no. 6, p. 326, 1997.

⁴ Liberty, Lee M. , Barrash, Warren , Knoll, Michael D. , and Bolger, R. D. , Geophysical and borehole measurements from southern Birch Creek valley in eastern Idaho: implications for groundwater flow,

approximated as a rectangular section, with the bottom elevation representing the average depth across the section. Recharge on the valley floor is assumed to be minimal – estimated at 1.5 inches/year.

Seepage from Birch Creek has been well-documented in the reach from the USGS Blue Dome gauge to the “Highway Weir,” which is located on the Reno Ditch (power canal ditch) at the highway crossing. Since the ditch is lined, this weir essentially measures Birch Creek discharge at the ditch diversion. The ditch diverts all of Birch Creek with no flow or seepage below this point. Based on discharge measurements at the Blue Dome USGS gage and the ‘Highway Weir’, the average seepage estimated over the period 1989-1996 is 26 cfs for the entire course of the stream .

C.2.2. Boundary Conditions

At the upper model boundary a constant flux of 10,000 ac-ft/year was estimated. Due to the constricted nature of the aquifer at this point, physical constraints limit the flow in the Blue Dome area. This flux results in computed water surface elevations from 30 to 50 feet below ground in this area, which is reasonable based on local knowledge of wells. At the lower boundary a constant head of 1500 meters was included based loosely on seismic data and adjacent water levels in ESRPA. At the sides of valley, steady underflow was assumed from side-drainages below Blue Dome, while no-flow boundaries were modeled above Blue Dome.

C.2.3. Model Inflow & Outflow

<u>Location</u>	<u>Flux (ac-ft/year)</u>
• Upper boundary	10,000

- Birch Creek seepage 18,800 (26 cfs)
- West side underflow 8,000 (estimate)
- East side underflow 8,000 (estimate)
- Precipitation Recharge 5,200
- TOTAL 50,000 = underflow at the lower boundary

At the lower boundary, the annual tributary underflow volume used in the ESRPA model is 69,000 ac-ft/year⁵, rather than the 50,000 ac-ft/year calculated here. It appears that the tributary underflow value utilized in development of the ESPA model may be an overestimate based on the above analyses. Tributary underflow values being used in the ESPA Enhanced Ground Water Model are being re-evaluated by IDWR and the Water Resources Research Institute (IWRRI). The inflows were assumed to be constant, resulting in a baseline steady-state model run.

C.2.4. Modeled Diversions based on Transfers #72493 and #72494

To estimate the depletion effects of the proposed well pumping, a transient run was made with the new well pumping. This run was made using the steady-state conditions as the starting conditions but with the well pumping added. For this case, the model was run in transient mode for 50 years with a 1-year time step.

The modeled diversion was the total allowable volume of 3352.5 ac-ft/year from the wells at the two locations identified on the transfer applications. Full penetration of the aquifer was assumed. The pumping was assumed to be constant, beginning in year 1

⁵ D.M. Cosgrove, B.A. Contor,, G.S. Johnson, 2006. Enhanced Snake Plain Aquifer Model Final Report. Idaho Water Resources Research Institute (Technical Report 06-002), University of Idaho, Eastern Snake Plain Aquifer Model Enhancement Project Scenario Document Number DDM-019. Table 5.

and continuing until a new equilibrium was approached at the lower end of the aquifer. The net tributary underflow reduction each year after the proposed transfer resulting from the modeled diversion is shown in **Table 1**. These calculated values were utilized within the ESPA transfer spreadsheet to determine appropriate pumping fractions at the effective "TO" well within the active ESPA model cell located at the tributary underflow boundary.

C.3. Birch Creek Impacts.

Previous study has determined that Birch Creek is a losing reach from the Blue Dome area downstream.. In connection with previous evaluations of the hydrology of Birch Creek, test pits adjacent to the Creek throughout the reach were excavated to ascertain whether there was any hydraulic connection between the creek and local ground water. These evaluations and review of available driller's logs shows that the entire reach of Birch Creek from below Blue Dome to the power canal is perched and no hydraulic connection exists. All losses from Birch Creek therefore contribute to the local aquifer recharge and any changes in water levels associated with the proposed transfers will not significantly affect the flow in Birch Creek. There is apparently some connection between Birch Creek and the local aquifer for about on-half mile below Blue Dome which could be affected by significant lowering of the local water table. However, the net effect is estimated to be insignificant and cannot be determined with existing data.

D. Mitigation Requirements

D.1. Regional ESPA Impacts & Mitigation.

The results of the change in tributary underflow calculated using the local ground water model developed for this analysis were utilized for the pumping fraction of the transferred water rights. This analysis shows no significant transient impacts within the ESPA due to the transfer, however a net reduction in total pumping at the Blue Dome site is required to mitigate additional long-term depletions calculated in the Snake River reaches. The greatest additional impacts occur in the upper reaches of the Snake River from Shelley to Neeley. Reduction of overall pumping at the new diversion point to approximately 88% of the transferred volume reduces additional reach depletions to within 5% of levels calculated due to historical diversion of the proposed transferred water rights.

D.2. Local Impacts & Mitigation

D.2.1. Ground Water

Evaluation of local impacts using the Birch Creek Valley ground water model described above indicate ground water declines to the nearest other ground water user (Betty & Mac Wagoner; Water Right 32-10008; Well approximately 200' to the northwest – See FIGURE 2) in the range of 30-40 feet at steady state. This is a significant impact and some method of compensation should be considered. Probably the most effective mitigation would consist of providing a potable domestic water source via pipeline from the existing or proposed new wells associated with the transfer.

D.2.2. Birch Creek

Previous study has determined that Birch Creek is a losing reach from the Blue Dome area downstream to the USGS gage. Although some impacts due to the proposed ground water pumping possibly extend upwards to the point where the water table and Birch Creek are hydraulically connected, these impacts are likely insignificant

E. ESPA Mitigation Reduction Alternatives

Review of the ESPA transfer spreadsheet results in comparison with the calculated delay of tributary underflow impacts shows that the overall mitigation requirement is driven by the steady state rather than transient conditions. This allows simplification of benefit analysis of potential additional water right acquisitions which would provide an offsetting effect to the ESPA reach impacts. By evaluating total steady state reach impacts resulting from a combination of all considered water rights, it is apparent which river reaches are most effected. This assists in guiding selection of locations of additional water rights which might be acquired and combined with the rights proposed to be transferred to balance the reach impacts. Previous consideration of several different water rights show that strategic purchase and inclusion of water rights from the Blackfoot area perhaps combined with a very few acres of water rights from the Magic Valley could allow full diversion of all combined water rights at the new diversion location with no reduction required to maintain ESPA river reach impacts within 5% of historical calculated values. Preliminary analysis of including additional strategically located water rights indicates that the nearly the full transferred volume can be available in the Blue Dome area by addition of around 200 acres of water rights from the Shelley-Blackfoot area with the addition of some 5 acres from the Magic Valley area to mitigate additional impacts in the Thousand Springs area. Of course, total availability and required amounts depend upon their exact locations within the ESPA.

Another possibility for consideration is to transfer only a portion of the water rights for diversion in the Blue Dome area such that the portion diverted at the Blue Dome site does not increase net reach impacts above 5% of historical levels. Preliminary

evaluation of this alternative suggests that as much as 25% of the authorized volume currently proposed for transfer could be diverted with no net reduction in overall volume available (i.e. the other 75% is available for diversion at the current locations). Of course, varying proportions of total reductions vs. available diversion at Blue Dome could be developed depending upon acceptable mitigation amounts and available well capacity with the two ends of the spectrum being: 12% net reduction with 88% available for diversion at Blue Dome ; 0% net reduction with 25% available for diversion at Blue Dome.

F. Results & Conclusions

F.1. Regional ESPA Impacts

Transfer of Birch Creek Ranch & La Var Newman water rights from their current points of diversion to a location near Blue Dome on Birch Creek as currently structured appears to require a net total reduction of 12% in authorized diversion volume to mitigate increased impacts to Snake River reach gains. This analysis is somewhat simplified and assumes diversions and tributary reductions occur within single ESPA nodes. IDWR review may recommend a different model strategy with worst case reductions of up to 20% if ESPA nodes associated with the two up-gradient wells added by transfer #72204 (Approved 10/05) are required.

F.2. Local Impacts in the Blue Dome Area

Based on the results from the Birch Creek Valley ground water model developed for this project, local ground water level impacts will be significant with expected water level

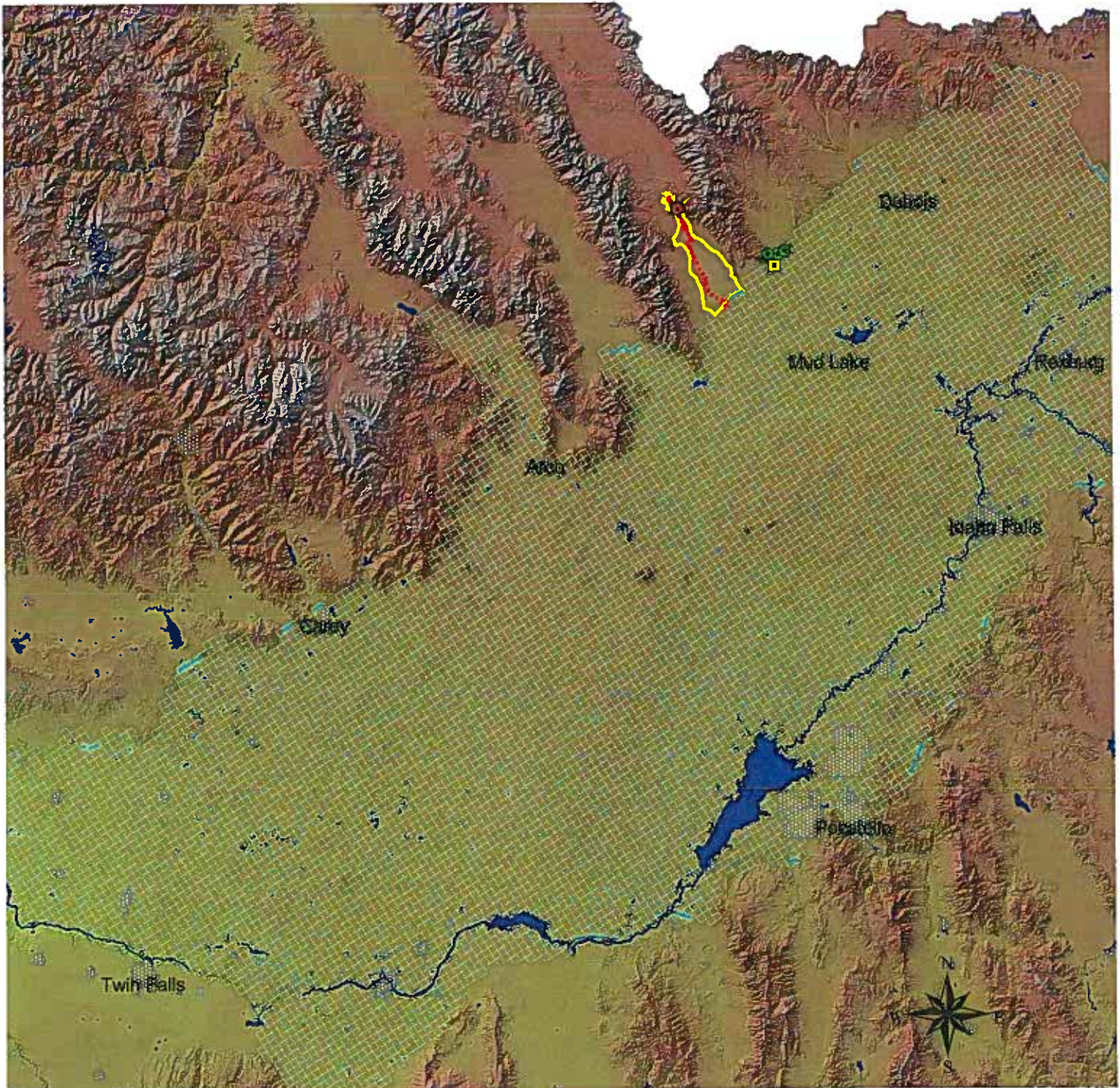
declines of as much as 30-40' in the vicinity of the nearest well (Wagoner) at steady state.

F.3. Birch Creek Impacts

Based on previous study and research of available information relating to Birch Creek, impacts on Birch Creek itself will be insignificant due to limited hydraulic connection in the area of the proposed project. Additionally, the applicants (Ted Sorenson & La Var Newman) are the owners of the Reno Ditch company which is the only water user on Birch Creek downstream of the proposed project so any surface water flow reduction occurring upstream due to the modeled ground water declines will be regained at the diversion of the Reno Ditch through the proposed pumping.

FIGURE 1

Birch Creek Ranch & La Var Newman Transfer #'s 72493 & 72494 ESPA Overview



Idaho Shaded Relief

30 0 30 60 Miles

- 32-2100, 10154 EXTG. POD
- 32-7025, 10127 EXTG. POD
- Proposed POD
- ▬ Tributary Underflow Boundaries
- ▬ Birch Creek
- ▬ City Limits
- ▬ Enhanced ESPA Model Grid
- ▬ Additional Ground Water Model

FIGURE 2

Birch Creek Ranch & La Var Newman
Transfer #'s: 72493, 72494

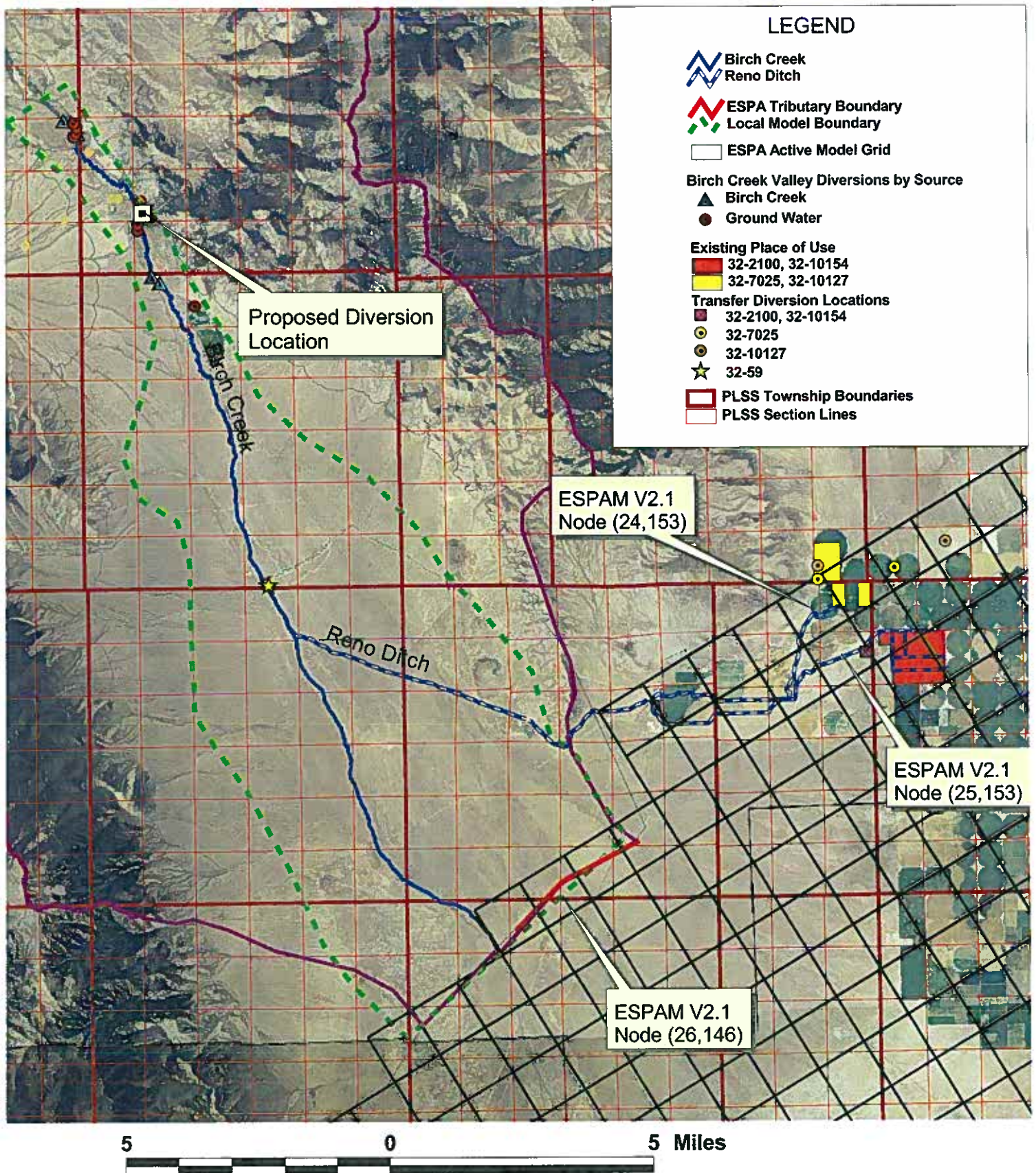


TABLE 1

SORENSEN, TED

BIRCH CREEK GROUNDWATER MODEL DEPLETION ANALYSIS

Base case: steady-state conditions, total basin outflow 50,000 ac-ft/year

Pumping case: T#72493 and T#72494

Wells at two locations, constant withdrawal 3352.5 ac-ft/year, half from each location

Computed values at down-gradient boundary:					
Year	Flow m3/d	Flow ac-ft/yr	Depletion ac-ft/yr	%	
0	168881	49972	0	0.0	(Steady-state) 3352.5
1	168864.3	49967	5	0.1	3352.5
2	168852	49963	9	0.3	3352.5
3	168825.8	49956	16	0.5	3352.5
4	168766.6	49938	34	1.0	3352.5
5	168653.9	49905	67	2.0	3352.5
6	168470.5	49850	121	3.6	3352.5
7	168204.5	49772	200	6.0	3352.5
8	167852.2	49667	304	9.1	3352.5
9	167419.2	49539	433	12.9	3352.5
10	166914.4	49390	582	17.4	3352.5
11	166353	49224	748	22.3	3352.5
12	165755.6	49047	925	27.6	3352.5
13	165135.9	48864	1108	33.1	3352.5
14	164505.1	48677	1295	38.6	3352.5
15	163878	48492	1480	44.2	3352.5
16	163267.2	48311	1661	49.5	3352.5
17	162686.7	48139	1833	54.7	3352.5
18	162137	47976	1996	59.5	3352.5
19	161628.5	47826	2146	64.0	3352.5
20	161157.3	47686	2285	68.2	3352.5
21	160730.6	47560	2412	71.9	3352.5
22	160341.6	47445	2527	75.4	3352.5
23	159995.3	47343	2629	78.4	3352.5
24	159683.2	47250	2722	81.2	3352.5
25	159409.4	47169	2803	83.6	3352.5
26	159164.8	47097	2875	85.8	3352.5
27	158952.9	47034	2938	87.6	3352.5
28	158770.2	46980	2992	89.2	3352.5
29	158607.5	46932	3040	90.7	3352.5
30	158469.2	46891	3081	91.9	3352.5
31	158352.5	46857	3115	92.9	3352.5
32	158248.1	46826	3146	93.8	3352.5
33	158161.5	46800	3172	94.6	3352.5
34	158083.9	46777	3195	95.3	3352.5
35	158020.9	46758	3214	95.9	3352.5
36	157970.8	46744	3228	96.3	3352.5
37	157924.9	46730	3242	96.7	3352.5
38	157890.3	46720	3252	97.0	3352.5
39	157858.1	46710	3262	97.3	3352.5
40	157836	46704	3268	97.5	3352.5
41	157815	46697	3274	97.7	3352.5
42	157803.8	46694	3278	97.8	3352.5
43	157792.9	46691	3281	97.9	3352.5
44	157782.3	46688	3284	98.0	3352.5
45	157772	46685	3287	98.1	3352.5
46	157762	46682	3290	98.1	3352.5
47	157761.5	46682	3290	98.1	3352.5
48	157760.9	46681	3290	98.1	3352.5
49	157760.4	46681	3291	98.2	3352.5

**Birch Creek Groundwater Model
Depletion Analysis for T#72493 and T#72494 - Ted Sorenson**

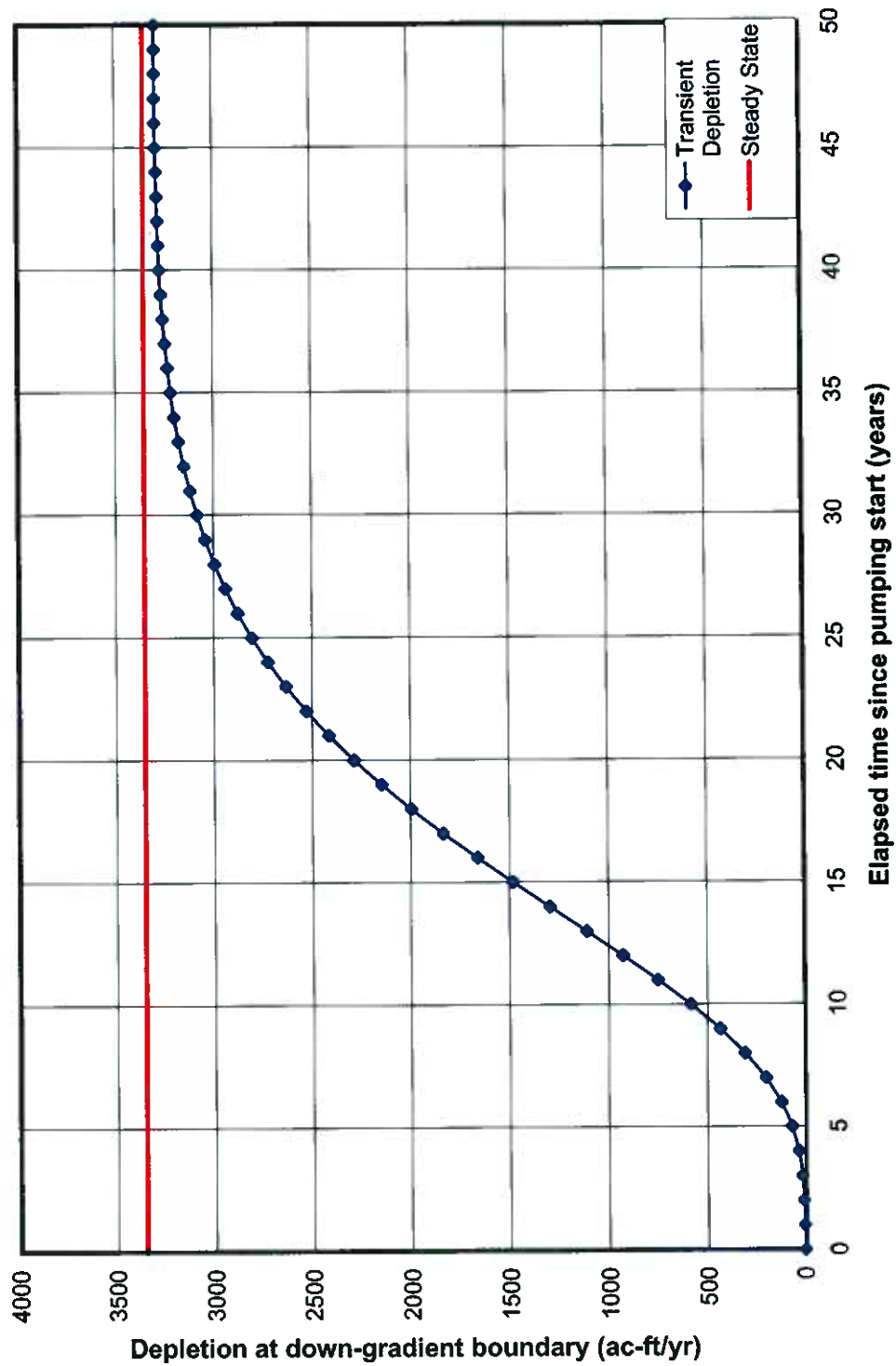


TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSHEET UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RESOURCES

Cells this color are set up for user entries

ENTER STARTING DATE FOR

SIMULATION. THEN PUSH "TRANSFER NO:

"UPDATE DATES" BUTTON

YEAR 1957

SEASON SPRING

TRANSFER NAME:

Birch Creek Ranch

ENTER CELL LOCATIONS:

	TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL
ROW	26	24	25	
COLUMN	146	153	153	

TRIMESTER OF ACTIVITY	TO WELL Projected Use AF/TRIMESTER	FROM1 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM2 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM3 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER
SPR 1957	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1957	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1957	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1958	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1958	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1958	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1959	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1959	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1959	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1960	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1960	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1960	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1961	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1961	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1961	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1962	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1962	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1962	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1963	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1963	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1963	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1964	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1964	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1964	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1965	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1965	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1965	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1966	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1966	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1966	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1967	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1967	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1967	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1968	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1968	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1968	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1969	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1969	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1969	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1970	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1970	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1970	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1971	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1971	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1971	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1972	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1972	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1972	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SPR 1973	0.0	0.0	0.0	420.0	420.0	0.0	0.0
SUM 1973	0.0	0.0	0.0	420.0	420.0	0.0	0.0
WIN 1973	0.0	472.5	472.5	420.0	420.0	0.0	0.0
SPR 1974	0.0	472.5	472.5	420.0	420.0	0.0	0.0
SUM 1974	0.0	472.5	472.5	420.0	420.0	0.0	0.0
WIN 1974	0.0	472.5	472.5	420.0	420.0	0.0	0.0
SPR 1975	0.0	472.5	472.5	420.0	420.0	0.0	0.0
SUM 1975	0.0	472.5	472.5	420.0	420.0	0.0	0.0
WIN 1975	0.0	472.5	472.5	645.0	645.0	0.0	0.0

Entering Dates

Enter the starting year and season of the analysis period.

Once you have entered the starting

1000 The date only needs to be updated

1 Modifying the date does not autom

3352.50 Entering Well Locations

Enter the row and column location

Enter the row and column location

Enter the row and column location

If the 'FROM2' well is not to be mo

If the 'FROM3' well is not to be mo

The 'FROM3' well cannot be used

Running the Model

Once the model cells have been set

the 'RUN MODEL' button to gener

needs to be re-run if the locations c

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RE

Cells this color are
set up for user entries

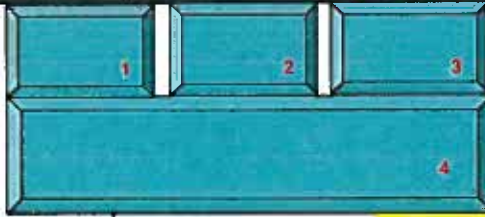
ENTER STARTING DATE FOR

SIMULATION. THEN PUSH "UPDATE DATES" BUTTON

TRANSFER NO: 72493.4

YEAR 1957 TRANSFER NAME:

SEASON SPRING Birch Creek Ranch



Entering Dates

Enter the starting year and season
of the analysis period.

Once you have entered the starting

1000 The date only needs to be updated

1 Modifying the date does not autom

3352.50 Entering Well Locations

Enter the row and column location

Enter the row and column location

Enter the row and column location

If the 'FROM2' well is not to be mo

ENTER CELL LOCATIONS:		32-7025,10127	32-2100,10154			7025 volume	1102.5 afa
		'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	10127 volume	315.0 afa
ROW	COLUMN	26	24	25		2100 volume	1260.0 afa
		146	153	153		10154 volume	675.0 afa
SPR 1976	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1976	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1976	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1977	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1977	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1977	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1978	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1978	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1978	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1979	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1979	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1979	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1980	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1980	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1980	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1981	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1981	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1981	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1982	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1982	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1982	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1983	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1983	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1983	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1984	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1984	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1984	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1985	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1985	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1985	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1986	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1986	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1986	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1987	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1987	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1987	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1988	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1988	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1988	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1989	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1989	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1989	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1990	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1990	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1990	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1991	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1991	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1991	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1992	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1992	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1992	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1993	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1993	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1993	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1994	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1994	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1994	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1995	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1995	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1995	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1996	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1996	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1996	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1997	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1997	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1997	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1998	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SUM 1998	0.0	472.5	472.5	645.0	645.0	0.0	0.0
WIN 1998	0.0	472.5	472.5	645.0	645.0	0.0	0.0
SPR 1999	0.0	472.5	472.5	645.0	645.0	0.0	0.0

TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RE

Cells this color are
set up for user entries

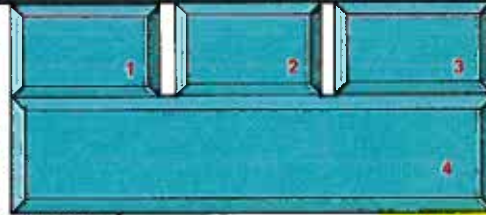
ENTER STARTING DATE FOR

SIMULATION. THEN PUSH **TRANSFER NO:**

"UPDATE DATES" BUTTON: 72493.4

YEAR 1957 **TRANSFER NAME:**

SEASON SPRING Birch Creek Ranch



Entering Dates

Enter the starting year and season
of the analysis period.

Once you have entered the starting

1000 The date only needs to be updated

1 Modifying the date does not autom

3352.50 Entering Well Locations

Enter the row and column location

Enter the row and column location

Enter the row and column location

If the 'FROM2' well is not to be mo

ENTER CELL LOCATIONS:		32-7025,10127	32-2100,10154			7025 volume	1102.5 afa
		'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	10127 volume	315.0 afa
						2100 volume	1260.0 afa
						10154 volume	675.0 afa
ROW	COLUMN						
SUM 1999		0.0	472.5	472.5	645.0	645.0	0.0
WIN 1999		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2000		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2000		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2000		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2001		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2001		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2001		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2002		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2002		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2002		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2003		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2003		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2003		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2004		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2004		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2004		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2005		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2005		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2005		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2006		0.0	472.5	472.5	645.0	645.0	0.0
SUM 2006		0.0	472.5	472.5	645.0	645.0	0.0
WIN 2006		0.0	472.5	472.5	645.0	645.0	0.0
SPR 2007		0.0	0.0	472.5	0.0	645.0	0.0
SUM 2007		0.0	0.0	472.5	0.0	645.0	0.0
WIN 2007		0.0	0.0	472.5	0.0	645.0	0.0
SPR 2008		1.4	0.0	472.5	0.0	645.0	0.0
SUM 2008		1.4	0.0	472.5	0.0	645.0	0.0
WIN 2008		1.4	0.0	472.5	0.0	645.0	0.0
SPR 2009		2.5	0.0	472.5	0.0	645.0	0.0
SUM 2009		2.5	0.0	472.5	0.0	645.0	0.0
WIN 2009		2.5	0.0	472.5	0.0	645.0	0.0
SPR 2010		4.8	0.0	472.5	0.0	645.0	0.0
SUM 2010		4.8	0.0	472.5	0.0	645.0	0.0
WIN 2010		4.8	0.0	472.5	0.0	645.0	0.0
SPR 2011		9.9	0.0	472.5	0.0	645.0	0.0
SUM 2011		9.9	0.0	472.5	0.0	645.0	0.0
WIN 2011		9.9	0.0	472.5	0.0	645.0	0.0
SPR 2012		19.7	0.0	472.5	0.0	645.0	0.0
SUM 2012		19.7	0.0	472.5	0.0	645.0	0.0
WIN 2012		19.7	0.0	472.5	0.0	645.0	0.0
SPR 2013		35.6	0.0	472.5	0.0	645.0	0.0
SUM 2013		35.6	0.0	472.5	0.0	645.0	0.0
WIN 2013		35.6	0.0	472.5	0.0	645.0	0.0
SPR 2014		58.7	0.0	472.5	0.0	645.0	0.0
SUM 2014		58.7	0.0	472.5	0.0	645.0	0.0
WIN 2014		58.7	0.0	472.5	0.0	645.0	0.0
SPR 2015		89.3	0.0	472.5	0.0	645.0	0.0
SUM 2015		89.3	0.0	472.5	0.0	645.0	0.0
WIN 2015		89.3	0.0	472.5	0.0	645.0	0.0
SPR 2016		126.9	0.0	472.5	0.0	645.0	0.0
SUM 2016		126.9	0.0	472.5	0.0	645.0	0.0
WIN 2016		126.9	0.0	472.5	0.0	645.0	0.0
SPR 2017		170.7	0.0	472.5	0.0	645.0	0.0
SUM 2017		170.7	0.0	472.5	0.0	645.0	0.0
WIN 2017		170.7	0.0	472.5	0.0	645.0	0.0
SPR 2018		219.4	0.0	472.5	0.0	645.0	0.0
SUM 2018		219.4	0.0	472.5	0.0	645.0	0.0
WIN 2018		219.4	0.0	472.5	0.0	645.0	0.0
SPR 2019		271.3	0.0	472.5	0.0	645.0	0.0
SUM 2019		271.3	0.0	472.5	0.0	645.0	0.0
WIN 2019		271.3	0.0	472.5	0.0	645.0	0.0
SPR 2020		325.1	0.0	472.5	0.0	645.0	0.0
SUM 2020		325.1	0.0	472.5	0.0	645.0	0.0
WIN 2020		325.1	0.0	472.5	0.0	645.0	0.0
SPR 2021		379.8	0.0	472.5	0.0	645.0	0.0
SUM 2021		379.8	0.0	472.5	0.0	645.0	0.0
WIN 2021		379.8	0.0	472.5	0.0	645.0	0.0
SPR 2022		434.2	0.0	472.5	0.0	645.0	0.0
SUM 2022		434.2	0.0	472.5	0.0	645.0	0.0

Determined from Birch Cree
Valley Ground Water Mode
(CGB - 5/16/06)

Tributary Impact	Pumping Reduction
0.0%	12.0%
0.0%	12.0%
0.0%	12.0%
0.1%	12.0%
0.1%	12.0%
0.1%	12.0%
0.3%	12.0%
0.3%	12.0%
0.3%	12.0%
0.5%	12.0%
0.5%	12.0%
0.5%	12.0%
1.0%	12.0%
1.0%	12.0%
1.0%	12.0%
2.0%	12.0%
2.0%	12.0%
2.0%	12.0%
3.6%	12.0%
3.6%	12.0%
3.6%	12.0%
6.0%	12.0%
6.0%	12.0%
6.0%	12.0%
9.1%	12.0%
9.1%	12.0%
9.1%	12.0%
12.9%	12.0%
12.9%	12.0%
12.9%	12.0%
17.4%	12.0%
17.4%	12.0%
17.4%	12.0%
22.3%	12.0%
22.3%	12.0%
22.3%	12.0%
27.6%	12.0%
27.6%	12.0%
27.6%	12.0%
33.1%	12.0%
33.1%	12.0%
33.1%	12.0%
38.6%	12.0%
38.6%	12.0%
38.6%	12.0%
44.2%	12.0%
44.2%	12.0%

TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH															
UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE					IDAHO DEPARTMENT OF WATER RE										
Cells this color are set up for user entries					1 2 3 4										
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON YEAR: 1957 SEASON: SPRING TRANSFER NO: 72493.4 TRANSFER NAME: Birch Creek Ranch					Entering Dates Enter the starting year and season of the analysis period. Once you have entered the starting year, the date only needs to be updated. Modifying the date does not autom										
ENTER CELL LOCATIONS: TO' CELL: 26 FROM1' CELL: 24 FROM2' CELL: 25 FROM3' CELL: 25					Entering Well Locations Enter the row and column location Enter the row and column location Enter the row and column location If the 'FROM2' well is not to be mo										
ROW	COLUMN	TO' CELL	FROM1' CELL	FROM2' CELL	FROM3' CELL	7025 volume	1102.5 afa	10127 volume	315.0 afa	2100 volume	1260.0 afa	10154 volume	675.0 afa		
WIN 2022	434.2	0.0	472.5	0.0	645.0	0.0	0.0	44.2%	12.0%						
SPR 2023	487.3	0.0	472.5	0.0	645.0	0.0	0.0	49.5%	12.0%						
SUM 2023	487.3	0.0	472.5	0.0	645.0	0.0	0.0	49.5%	12.0%						
WIN 2023	487.3	0.0	472.5	0.0	645.0	0.0	0.0	49.5%	12.0%						
SPR 2024	537.6	0.0	472.5	0.0	645.0	0.0	0.0	54.7%	12.0%						
SUM 2024	537.6	0.0	472.5	0.0	645.0	0.0	0.0	54.7%	12.0%						
WIN 2024	537.6	0.0	472.5	0.0	645.0	0.0	0.0	54.7%	12.0%						
SPR 2025	585.4	0.0	472.5	0.0	645.0	0.0	0.0	59.5%	12.0%						
SUM 2025	585.4	0.0	472.5	0.0	645.0	0.0	0.0	59.5%	12.0%						
WIN 2025	585.4	0.0	472.5	0.0	645.0	0.0	0.0	59.5%	12.0%						
SPR 2026	629.5	0.0	472.5	0.0	645.0	0.0	0.0	64.0%	12.0%						
SUM 2026	629.5	0.0	472.5	0.0	645.0	0.0	0.0	64.0%	12.0%						
WIN 2026	629.5	0.0	472.5	0.0	645.0	0.0	0.0	64.0%	12.0%						
SPR 2027	670.4	0.0	472.5	0.0	645.0	0.0	0.0	68.2%	12.0%						
SUM 2027	670.4	0.0	472.5	0.0	645.0	0.0	0.0	68.2%	12.0%						
WIN 2027	670.4	0.0	472.5	0.0	645.0	0.0	0.0	68.2%	12.0%						
SPR 2028	707.4	0.0	472.5	0.0	645.0	0.0	0.0	71.9%	12.0%						
SUM 2028	707.4	0.0	472.5	0.0	645.0	0.0	0.0	71.9%	12.0%						
WIN 2028	707.4	0.0	472.5	0.0	645.0	0.0	0.0	71.9%	12.0%						
SPR 2029	741.2	0.0	472.5	0.0	645.0	0.0	0.0	75.4%	12.0%						
SUM 2029	741.2	0.0	472.5	0.0	645.0	0.0	0.0	75.4%	12.0%						
WIN 2029	741.2	0.0	472.5	0.0	645.0	0.0	0.0	75.4%	12.0%						
SPR 2030	771.3	0.0	472.5	0.0	645.0	0.0	0.0	78.4%	12.0%						
SUM 2030	771.3	0.0	472.5	0.0	645.0	0.0	0.0	78.4%	12.0%						
WIN 2030	771.3	0.0	472.5	0.0	645.0	0.0	0.0	78.4%	12.0%						
SPR 2031	798.3	0.0	472.5	0.0	645.0	0.0	0.0	81.2%	12.0%						
SUM 2031	798.3	0.0	472.5	0.0	645.0	0.0	0.0	81.2%	12.0%						
WIN 2031	798.3	0.0	472.5	0.0	645.0	0.0	0.0	81.2%	12.0%						
SPR 2032	822.1	0.0	472.5	0.0	645.0	0.0	0.0	83.0%	12.0%						
SUM 2032	822.1	0.0	472.5	0.0	645.0	0.0	0.0	83.0%	12.0%						
WIN 2032	822.1	0.0	472.5	0.0	645.0	0.0	0.0	83.0%	12.0%						
SPR 2033	843.3	0.0	472.5	0.0	645.0	0.0	0.0	85.8%	12.0%						
SUM 2033	843.3	0.0	472.5	0.0	645.0	0.0	0.0	85.8%	12.0%						
WIN 2033	843.3	0.0	472.5	0.0	645.0	0.0	0.0	85.8%	12.0%						
SPR 2034	861.5	0.0	472.5	0.0	645.0	0.0	0.0	87.6%	12.0%						
SUM 2034	861.5	0.0	472.5	0.0	645.0	0.0	0.0	87.6%	12.0%						
WIN 2034	861.5	0.0	472.5	0.0	645.0	0.0	0.0	87.6%	12.0%						
SPR 2035	877.2	0.0	472.5	0.0	645.0	0.0	0.0	89.2%	12.0%						
SUM 2035	877.2	0.0	472.5	0.0	645.0	0.0	0.0	89.2%	12.0%						
WIN 2035	877.2	0.0	472.5	0.0	645.0	0.0	0.0	89.2%	12.0%						
SPR 2036	891.9	0.0	472.5	0.0	645.0	0.0	0.0	90.7%	12.0%						
SUM 2036	891.9	0.0	472.5	0.0	645.0	0.0	0.0	90.7%	12.0%						
WIN 2036	891.9	0.0	472.5	0.0	645.0	0.0	0.0	90.7%	12.0%						
SPR 2037	903.7	0.0	472.5	0.0	645.0	0.0	0.0	91.9%	12.0%						
SUM 2037	903.7	0.0	472.5	0.0	645.0	0.0	0.0	91.9%	12.0%						
WIN 2037	903.7	0.0	472.5	0.0	645.0	0.0	0.0	91.9%	12.0%						
SPR 2038	913.6	0.0	472.5	0.0	645.0	0.0	0.0	92.9%	12.0%						
SUM 2038	913.6	0.0	472.5	0.0	645.0	0.0	0.0	92.9%	12.0%						
WIN 2038	913.6	0.0	472.5	0.0	645.0	0.0	0.0	92.9%	12.0%						
SPR 2039	922.4	0.0	472.5	0.0	645.0	0.0	0.0	93.8%	12.0%						
SUM 2039	922.4	0.0	472.5	0.0	645.0	0.0	0.0	93.8%	12.0%						
WIN 2039	922.4	0.0	472.5	0.0	645.0	0.0	0.0	93.8%	12.0%						
SPR 2040	930.3	0.0	472.5	0.0	645.0	0.0	0.0	94.6%	12.0%						
SUM 2040	930.3	0.0	472.5	0.0	645.0	0.0	0.0	94.6%	12.0%						
WIN 2040	930.3	0.0	472.5	0.0	645.0	0.0	0.0	94.6%	12.0%						
SPR 2041	937.2	0.0	472.5	0.0	645.0	0.0	0.0	95.3%	12.0%						
SUM 2041	937.2	0.0	472.5	0.0	645.0	0.0	0.0	95.3%	12.0%						
WIN 2041	937.2	0.0	472.5	0.0	645.0	0.0	0.0	95.3%	12.0%						
SPR 2042	943.1	0.0	472.5	0.0	645.0	0.0	0.0	95.9%	12.0%						
SUM 2042	943.1	0.0	472.5	0.0	645.0	0.0	0.0	95.9%	12.0%						
WIN 2042	943.1	0.0	472.5	0.0	645.0	0.0	0.0	95.9%	12.0%						
SPR 2043	947.5	0.0	472.5	0.0	645.0	0.0	0.0	96.3%	12.0%						
SUM 2043	947.5	0.0	472.5	0.0	645.0	0.0	0.0	96.3%	12.0%						
WIN 2043	947.5	0.0	472.5	0.0	645.0	0.0	0.0	96.3%	12.0%						
SPR 2044	950.9	0.0	472.5	0.0	645.0	0.0	0.0	96.7%	12.0%						
SUM 2044	950.9	0.0	472.5	0.0	645.0	0.0	0.0	96.7%	12.0%						
WIN 2044	950.9	0.0	472.5	0.0	645.0	0.0	0.0	96.7%	12.0%						
SPR 2045	953.9	0.0	472.5	0.0	645.0	0.0	0.0	97.0%	12.0%						
SUM 2045	953.9	0.0	472.5	0.0	645.0	0.0	0.0	97.0%	12.0%						
WIN 2045	953.9	0.0	472.5	0.0	645.0	0.0	0.0	97.0%	12.0%						

TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH										
UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE					IDAHO DEPARTMENT OF WATER RE					
Cells this color are set up for user entries					1 2 3 4					
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON TRANSFER NO: 72493.4 YEAR: 1957 SEASON: SPRING TRANSFER NAME: Birch Creek Ranch					Entering Dates Enter the starting year and season of the analysis period. Once you have entered the starting 1000 The date only needs to be updated 1 Modifying the date does not autom					
ENTER CELL LOCATIONS: 32-7025,10127 32-2100,10154 'TO' CELL: 26 24 'FROM1' CELL: 153 153 'FROM2' CELL: 25 'FROM3' CELL:					7025 volume 1102.5 afa 10127 volume 315.0 afa 2100 volume 1260.0 afa 10154 volume 875.0 afa					
ROW	COLUMN	TO CELL	FROM1 CELL	FROM2 CELL	FROM3 CELL	7025 volume	10127 volume	2100 volume	10154 volume	3352.50 Entering Well Locations Enter the row and column location Enter the row and column location Enter the row and column location If the 'FROM2' well is not to be mo
SPR 2046	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.3%	12.0%
SUM 2046	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.3%	12.0%
WIN 2046	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.3%	12.0%
SPR 2047	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.5%	12.0%
SUM 2047	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.5%	12.0%
WIN 2047	956.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.5%	12.0%
SPR 2048	960.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.7%	12.0%
SUM 2048	960.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.7%	12.0%
WIN 2048	960.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.7%	12.0%
SPR 2049	961.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.8%	12.0%
SUM 2049	961.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.8%	12.0%
WIN 2049	961.8	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.8%	12.0%
SPR 2050	962.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.9%	12.0%
SUM 2050	962.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.9%	12.0%
WIN 2050	962.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	97.9%	12.0%
SPR 2051	963.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.0%	12.0%
SUM 2051	963.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.0%	12.0%
WIN 2051	963.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.0%	12.0%
SPR 2052	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SUM 2052	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
WIN 2052	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SPR 2053	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SUM 2053	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
WIN 2053	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SPR 2054	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SUM 2054	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
WIN 2054	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SPR 2055	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SUM 2055	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
WIN 2055	964.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.1%	12.0%
SPR 2056	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
SUM 2056	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
WIN 2056	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
SPR 2057	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
SUM 2057	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
WIN 2057	965.7	0.0	472.5	0.0	645.0	0.0	0.0	0.0	98.2%	12.0%
SPR 2058	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SUM 2058	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
WIN 2058	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SPR 2059	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SUM 2059	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
WIN 2059	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SPR 2060	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SUM 2060	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
WIN 2060	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SPR 2061	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SUM 2061	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
WIN 2061	973.6	0.0	472.5	0.0	645.0	0.0	0.0	0.0	99.0%	12.0%
SPR 2062	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2062	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2062	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2063	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2063	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2063	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2064	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2064	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2064	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2065	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2065	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2065	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2066	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2066	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2066	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2067	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2067	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2067	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2068	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SUM 2068	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
WIN 2068	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%
SPR 2069	983.4	0.0	472.5	0.0	645.0	0.0	0.0	0.0	100.0%	12.0%

TABLE 2

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RE

Cells this color are
set up for user entries

ENTER STARTING DATE FOR

SIMULATION. THEN PUSH **TRANSFER NO:**

"UPDATE DATES" BUTTON **72493.4**

YEAR

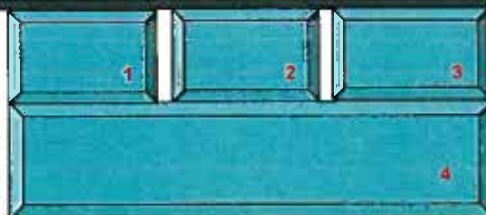
1957

TRANSFER NAME:

SEASON

SPRING

Birch Creek Ranch



Entering Dates

Enter the starting year and season
of the analysis period.

Once you have entered the starting

1000 The date only needs to be updated

1 Modifying the date does not autom

3352.50 Entering Well Locations

Enter the row and column location

Enter the row and column location

Enter the row and column location

If the 'FROM2' well is not to be mo

ENTER CELL LOCATIONS:		32-7025,10127	32-2100,10154			7025 volume	1102.5 afa		
		'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	10127 volume	315.0 afa		
						2100 volume	1260.0 afa		
						10154 volume	675.0 afa		
ROW	COLUMN	26	24	25					
		146	153	153					
SUM 2069		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2069		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2070		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2070		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2070		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2071		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2071		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2071		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2072		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2072		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2072		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2073		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2073		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2073		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2074		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2074		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2074		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2075		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2075		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2075		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2076		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2076		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2076		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2077		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2077		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2077		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2078		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2078		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2078		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2079		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2079		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2079		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2080		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2080		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2080		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2081		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2081		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2081		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2082		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2082		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2082		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2083		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2083		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2083		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2084		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2084		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2084		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2085		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2085		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2085		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2086		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2086		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2086		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2087		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2087		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2087		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2088		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2088		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2088		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2089		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2089		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2089		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2090		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2090		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2090		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2091		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2091		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
WIN 2091		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SPR 2092		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%
SUM 2092		983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0% 12.0%

TABLE 2

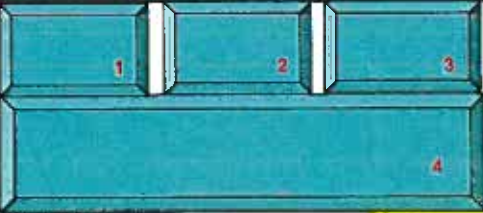
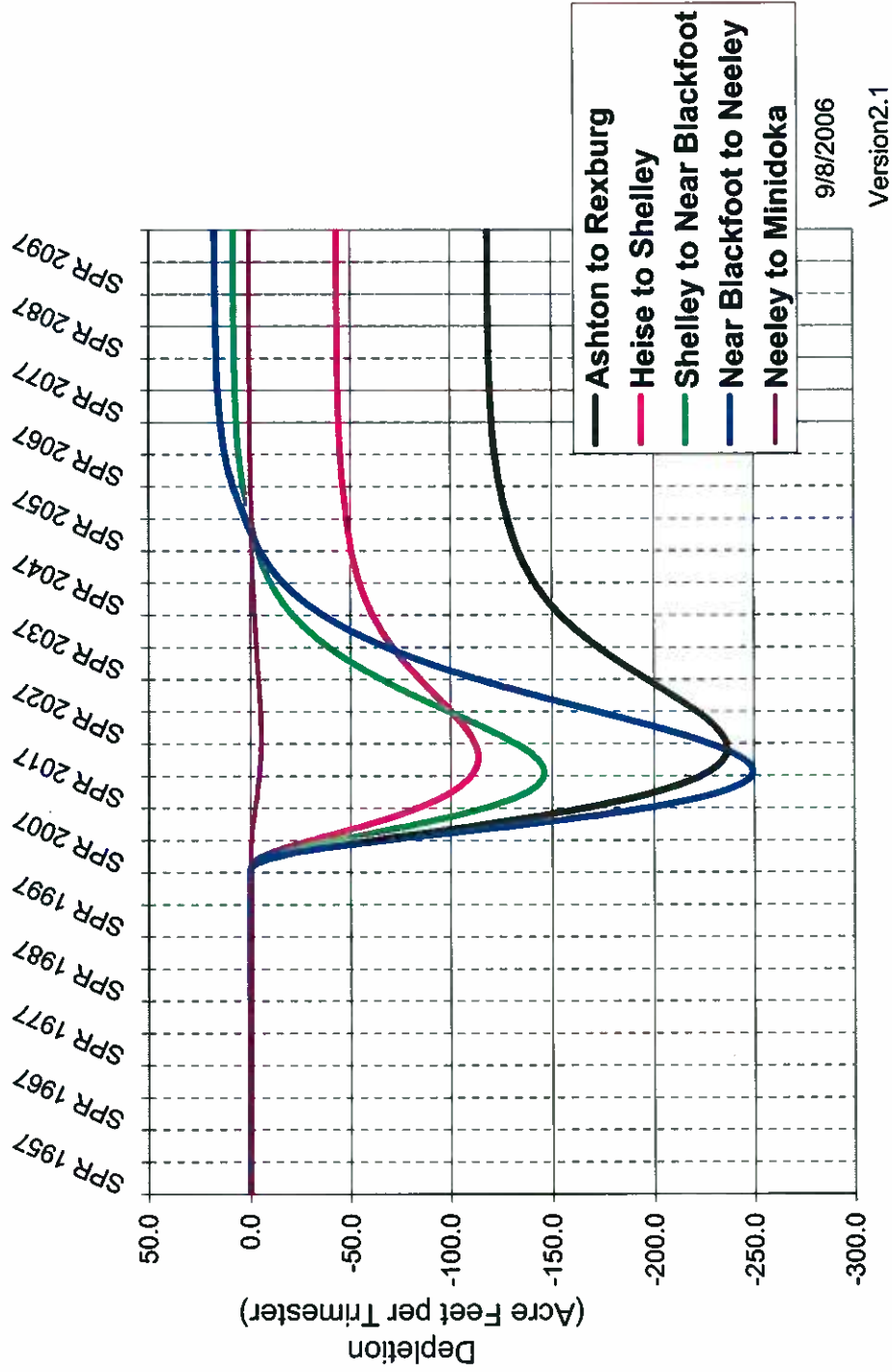
ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSH UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RE									
Cells this color are set up for user entries							Entering Dates Enter the starting year and season of the analysis period. Once you have entered the starting year, the date only needs to be updated. 1 Modifying the date does not autom		
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON YEAR: 1957 SEASON: SPRING				TRANSFER NO: 72493.4 TRANSFER NAME: Birch Creek Ranch		3352.50 Entering Well Locations Enter the row and column location Enter the row and column location Enter the row and column location If the 'FROM2' well is not to be mo			
ENTER CELL LOCATIONS: 32-7025,10127 32-2100,10154				7025 volume 1102.5 afa 10127 volume 315.0 afa 2100 volume 1260.0 afa 10154 volume 675.0 afa					
ROW	COLUMN	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL				
WIN 2092	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2093	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2093	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2093	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2094	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2094	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2094	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2095	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2095	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2095	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2096	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2096	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2096	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2097	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2097	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2097	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2098	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2098	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2098	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2099	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2099	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2099	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2100	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2100	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2100	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2101	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2101	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2101	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2102	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2102	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2102	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2103	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2103	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2103	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2104	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2104	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2104	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2105	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2105	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2105	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SPR 2106	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
SUM 2106	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%
WIN 2106	983.4	0.0	472.5	0.0	645.0	0.0	0.0	100.0%	12.0%

Chart 2.1

**Net Transfer Effect Above Milner
(Total Effect With Transfer - Total Effect Without Transfer)**



9/8/2006

Version 2.1

Transfer No: 72493,4

Birch Creek Ranches

Customer Name:

Chart 2.2

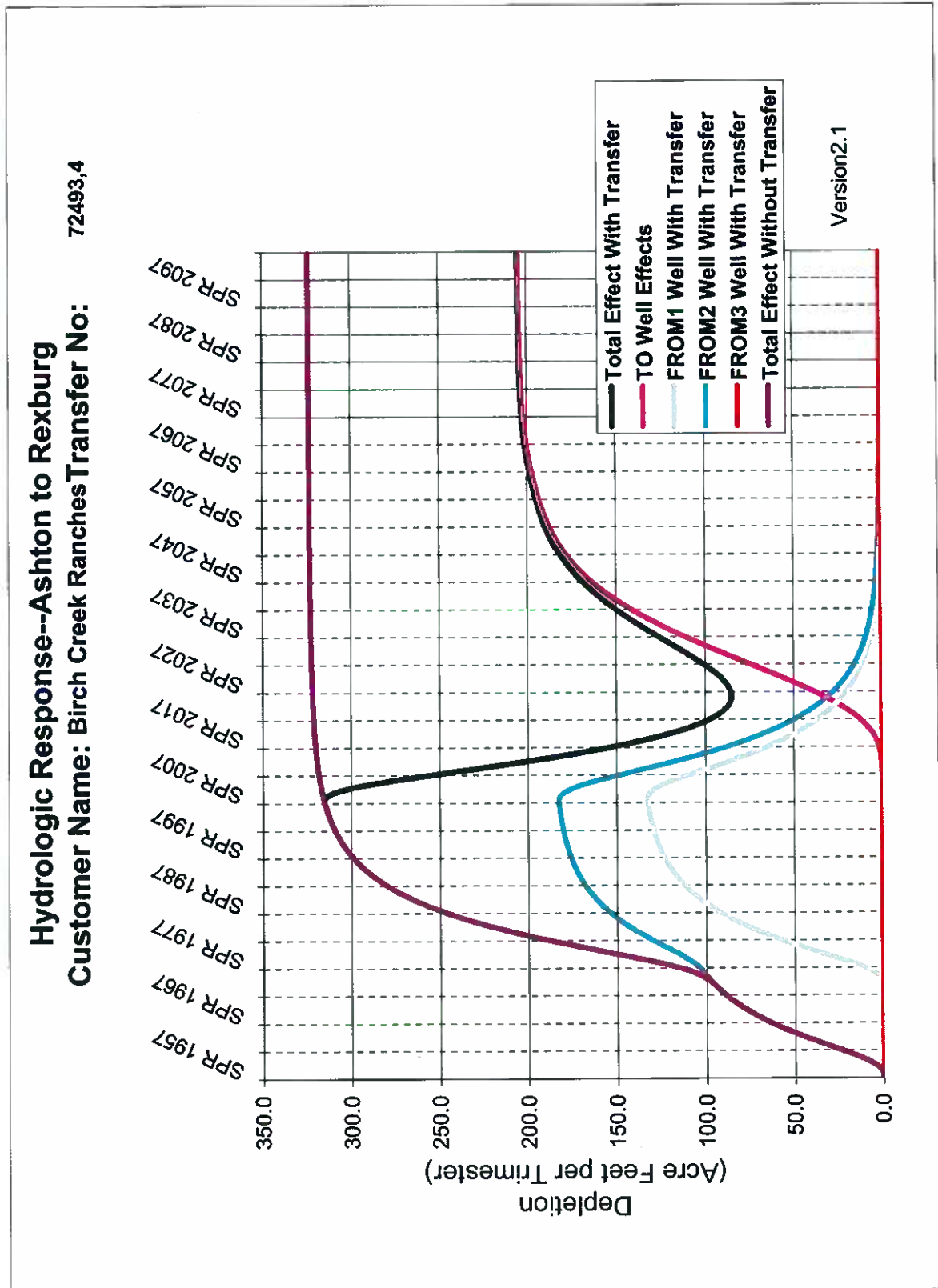


Chart 2.3

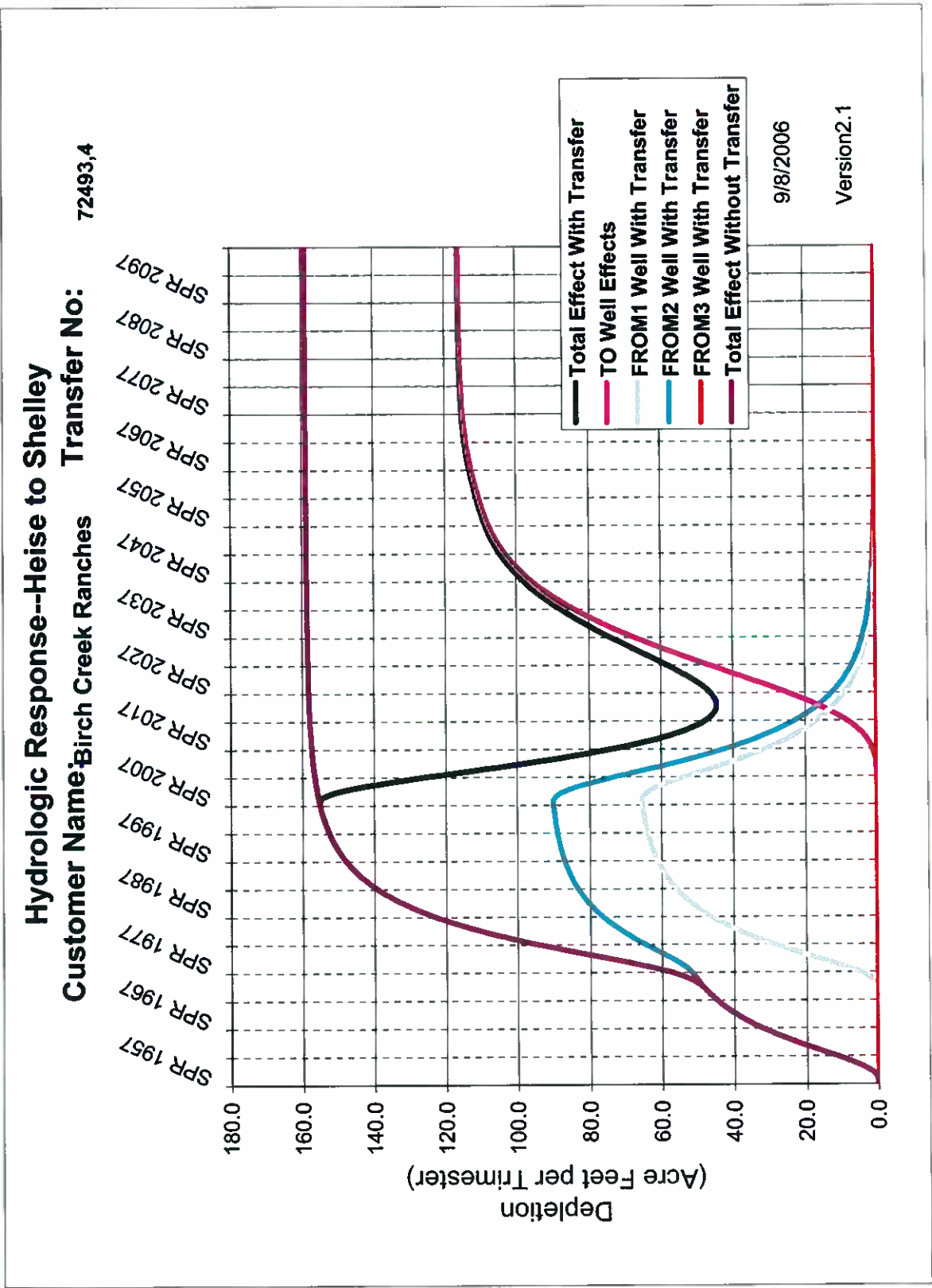


Chart 2.4

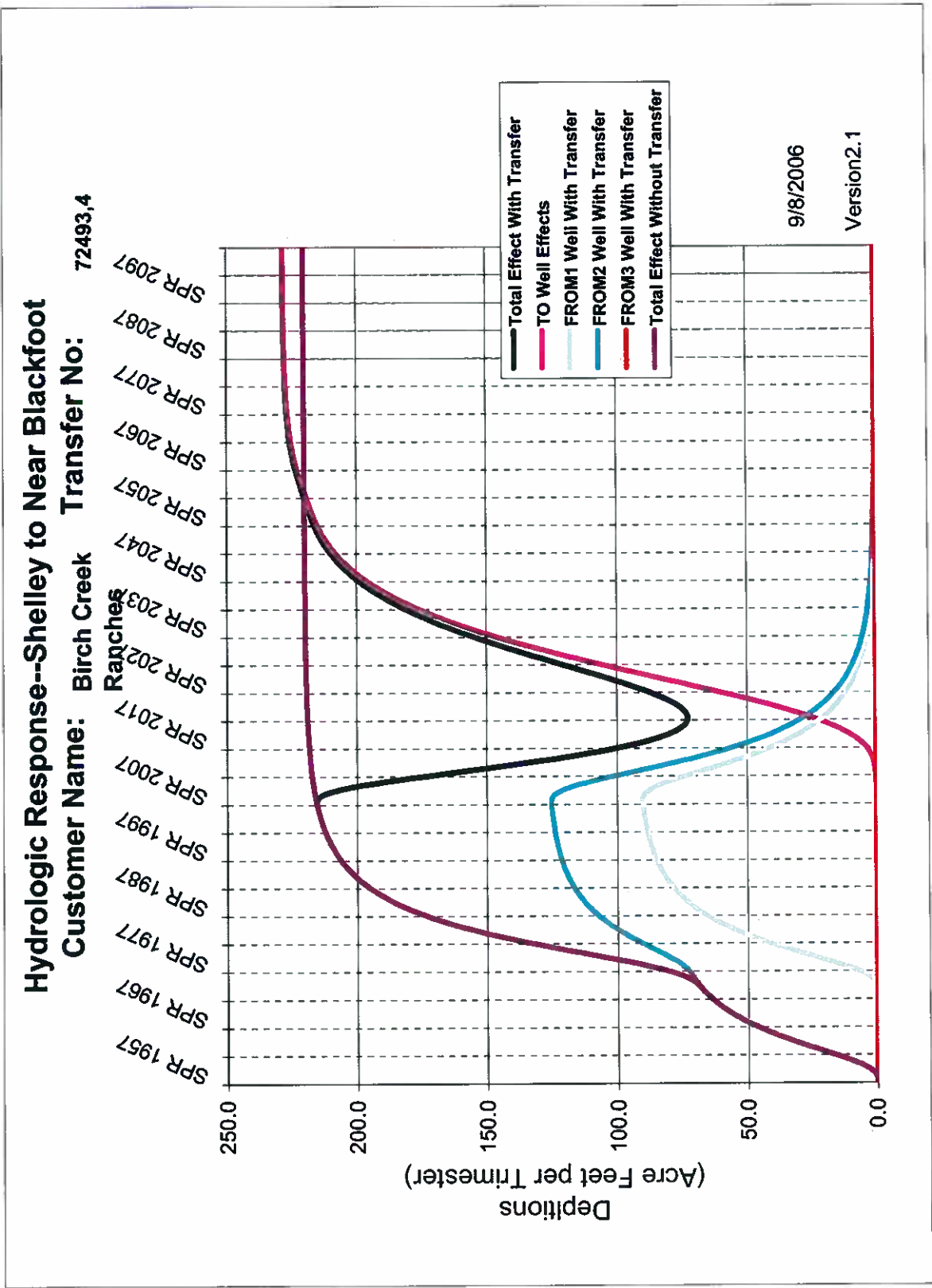


Chart 2.5

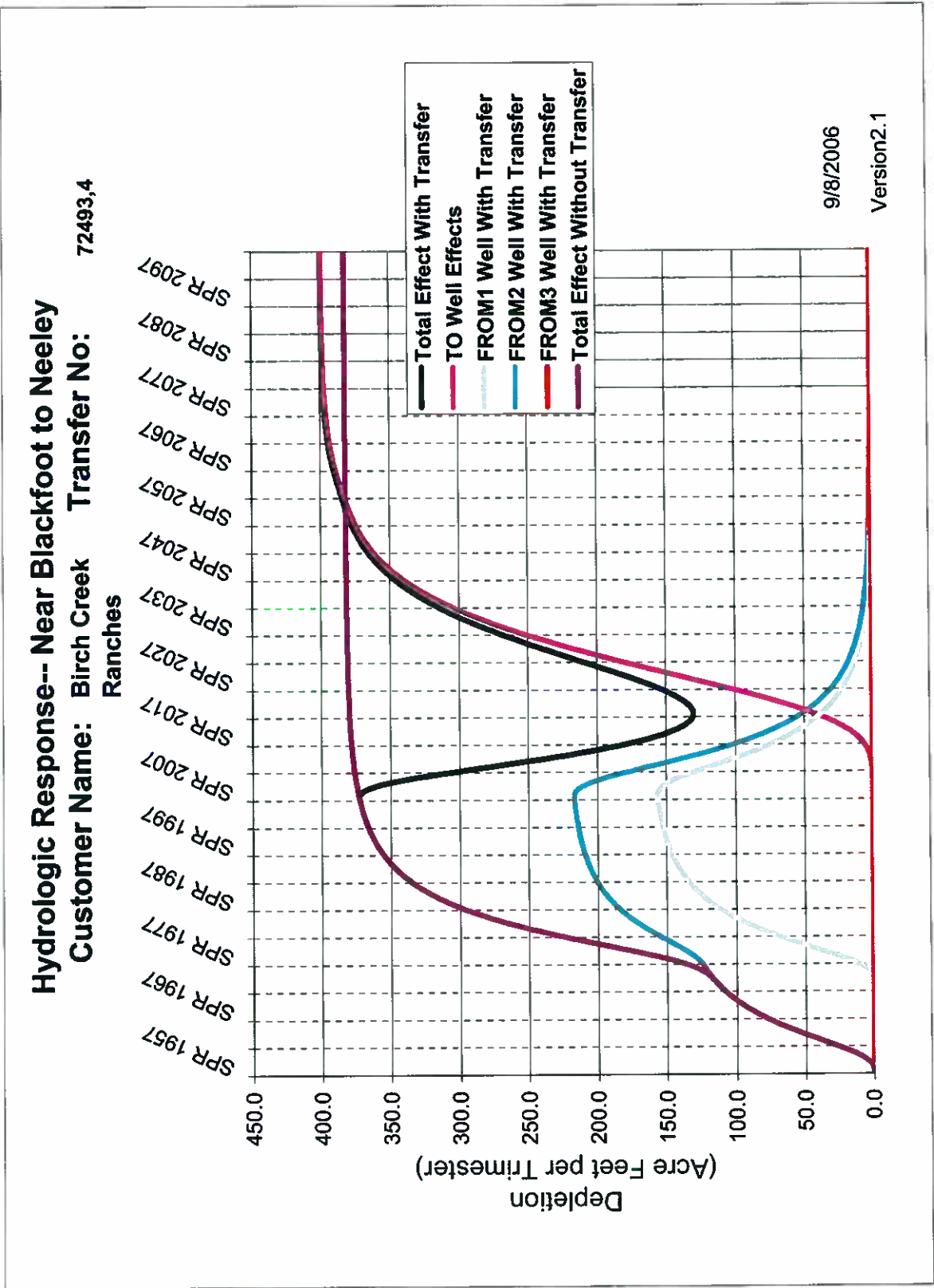


Chart 2.6

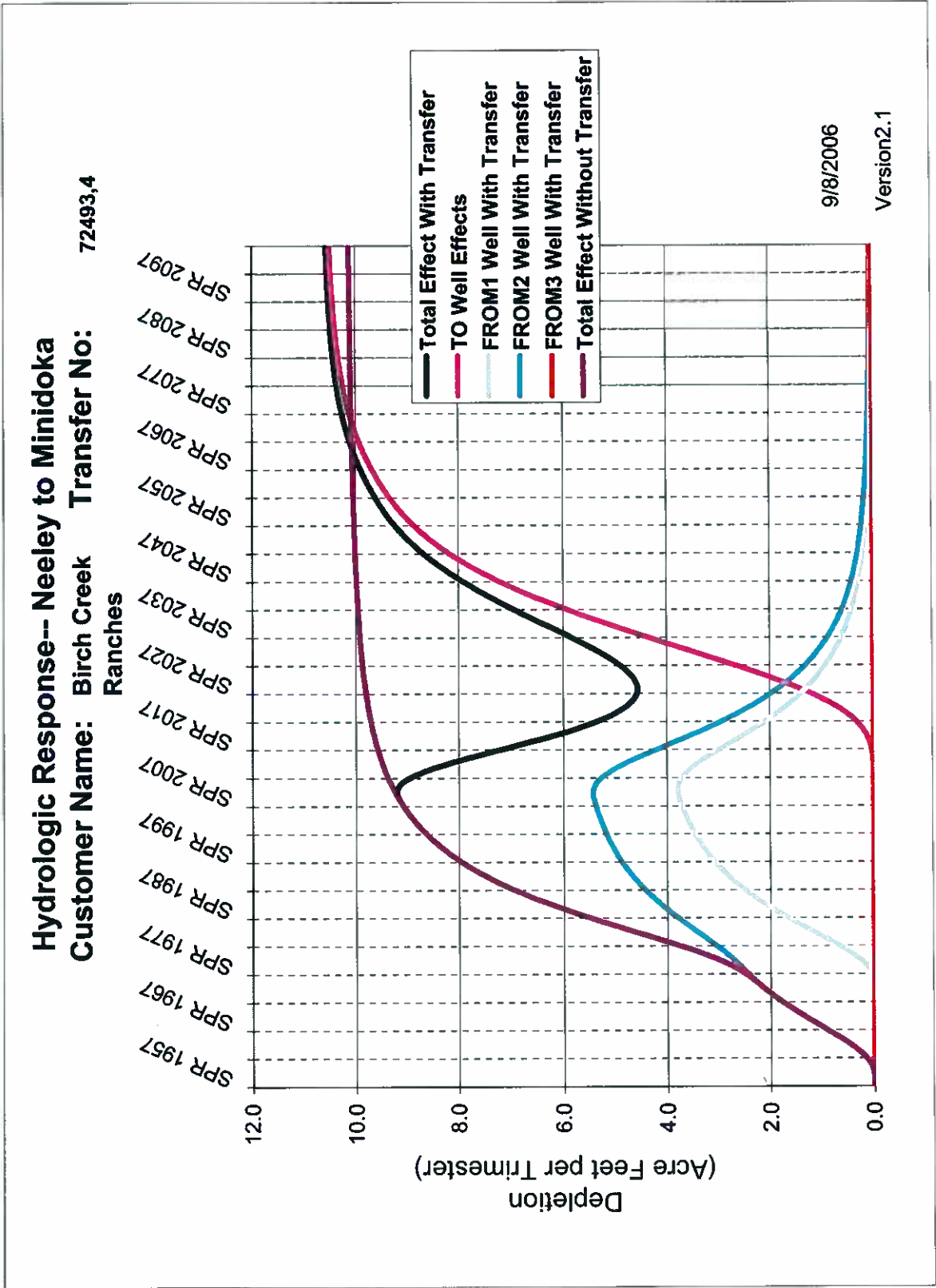
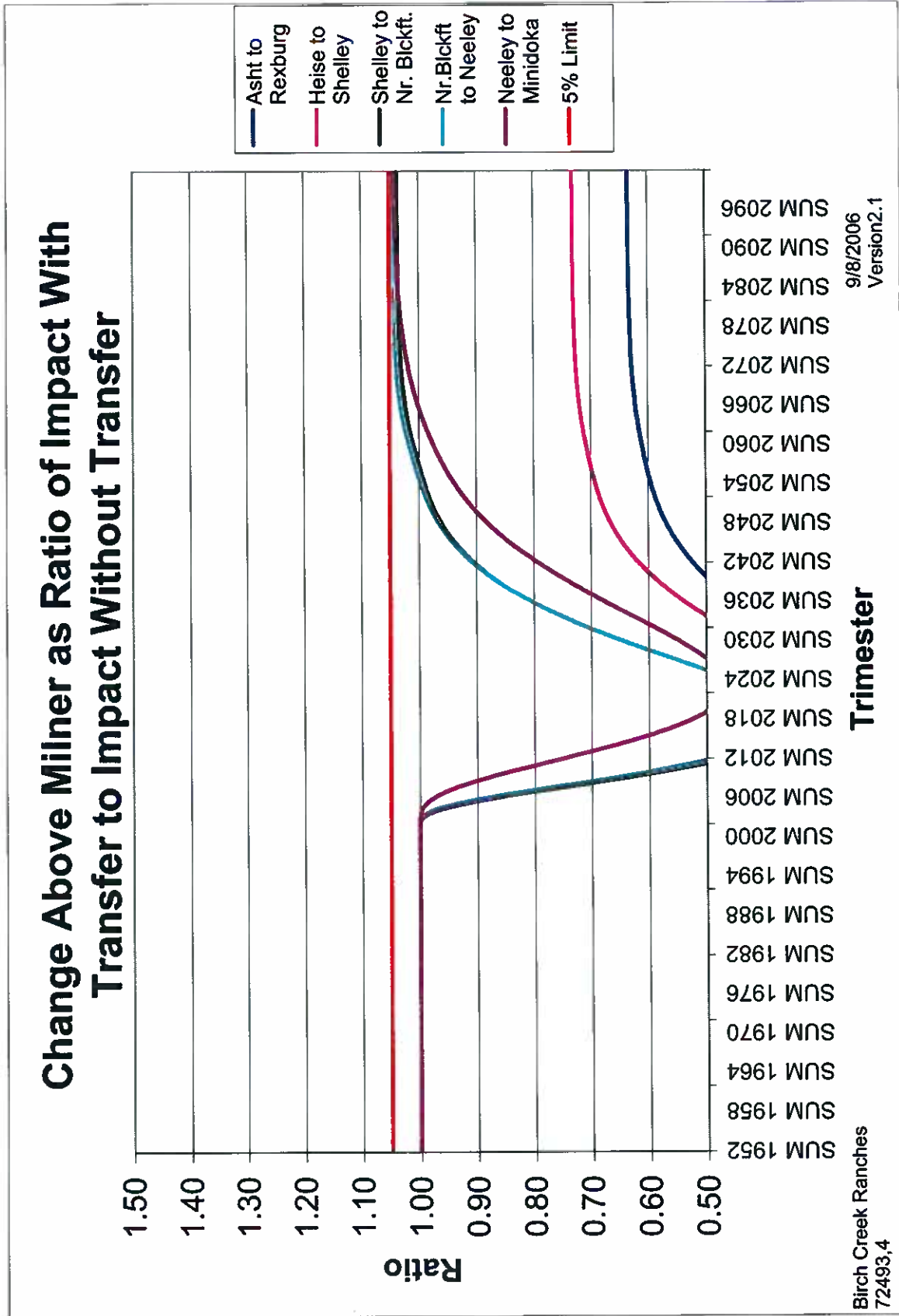
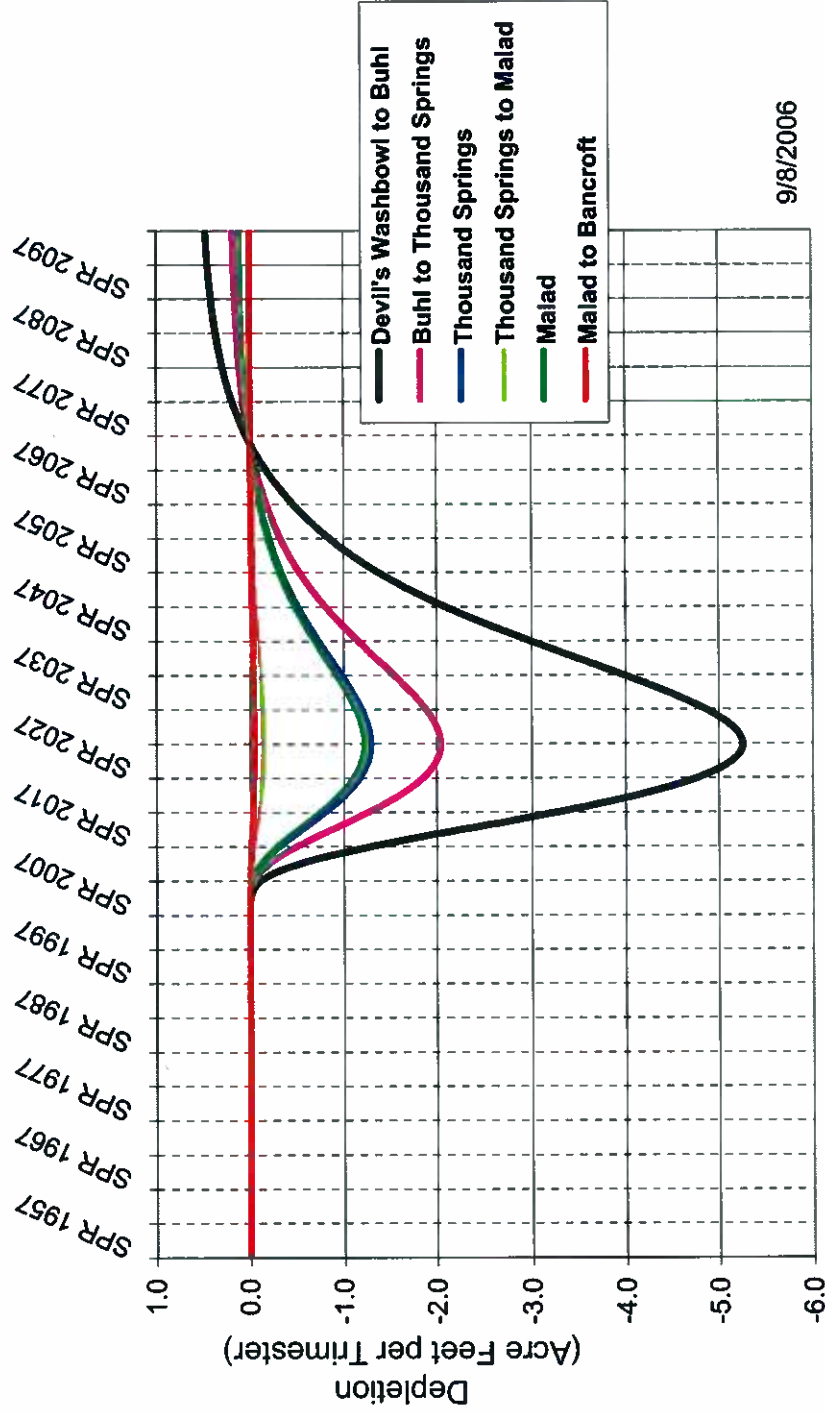


Chart 2.7



Net Transfer Effect Below Milner **(Total Effect With Transfer - Total Effect Without Transfer)**



9/8/2006

Version 2.1

Customer Name:

Birch Creek Ranches

Transfer No:

72493,4

Chart 2.8

Hydrologic Response--Devil's Washbowl to Buhl

Customer Name Birch Creek Ranches Transfer No: 72493,4

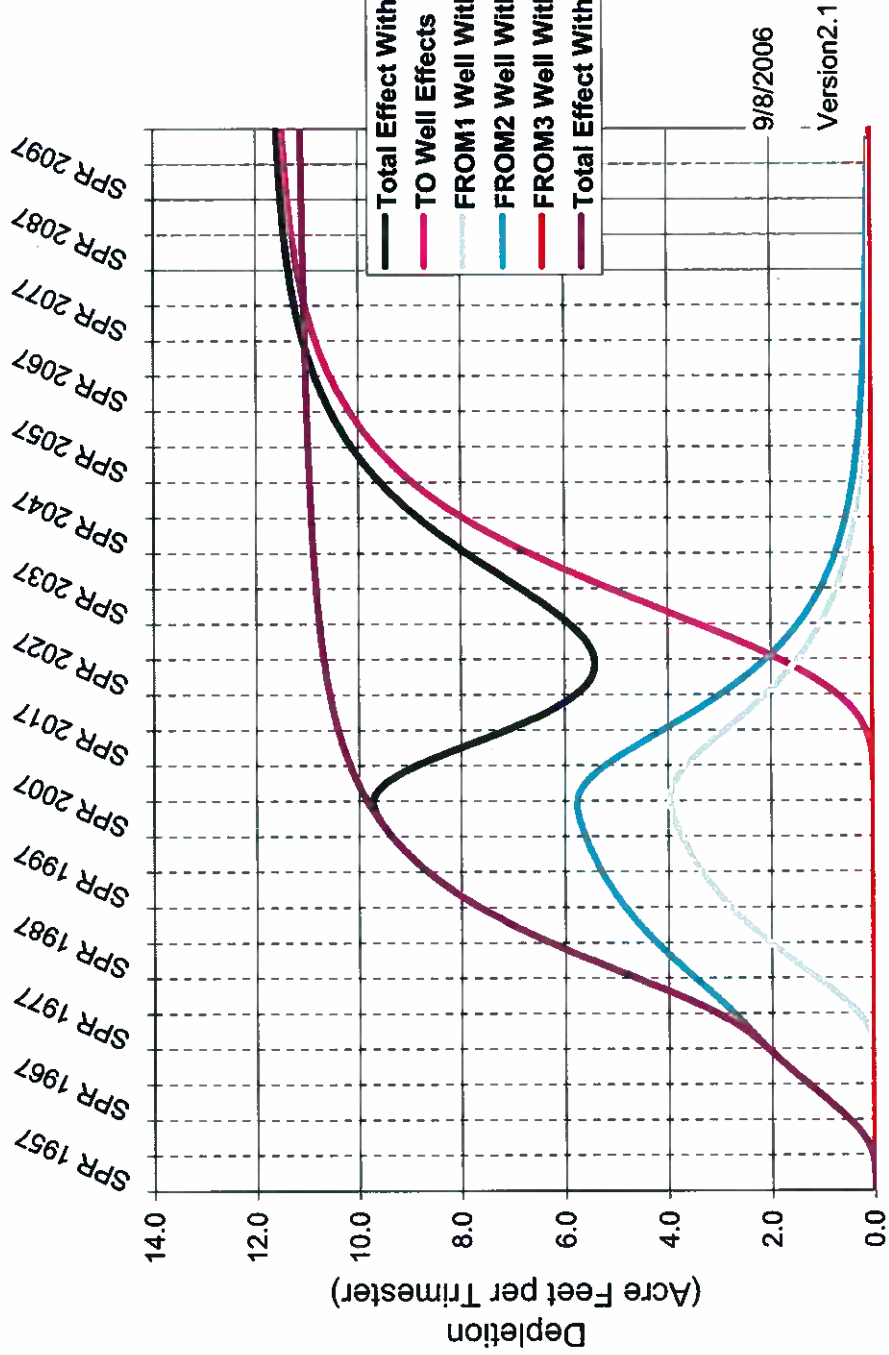


Chart 2.9

Chart 2.10

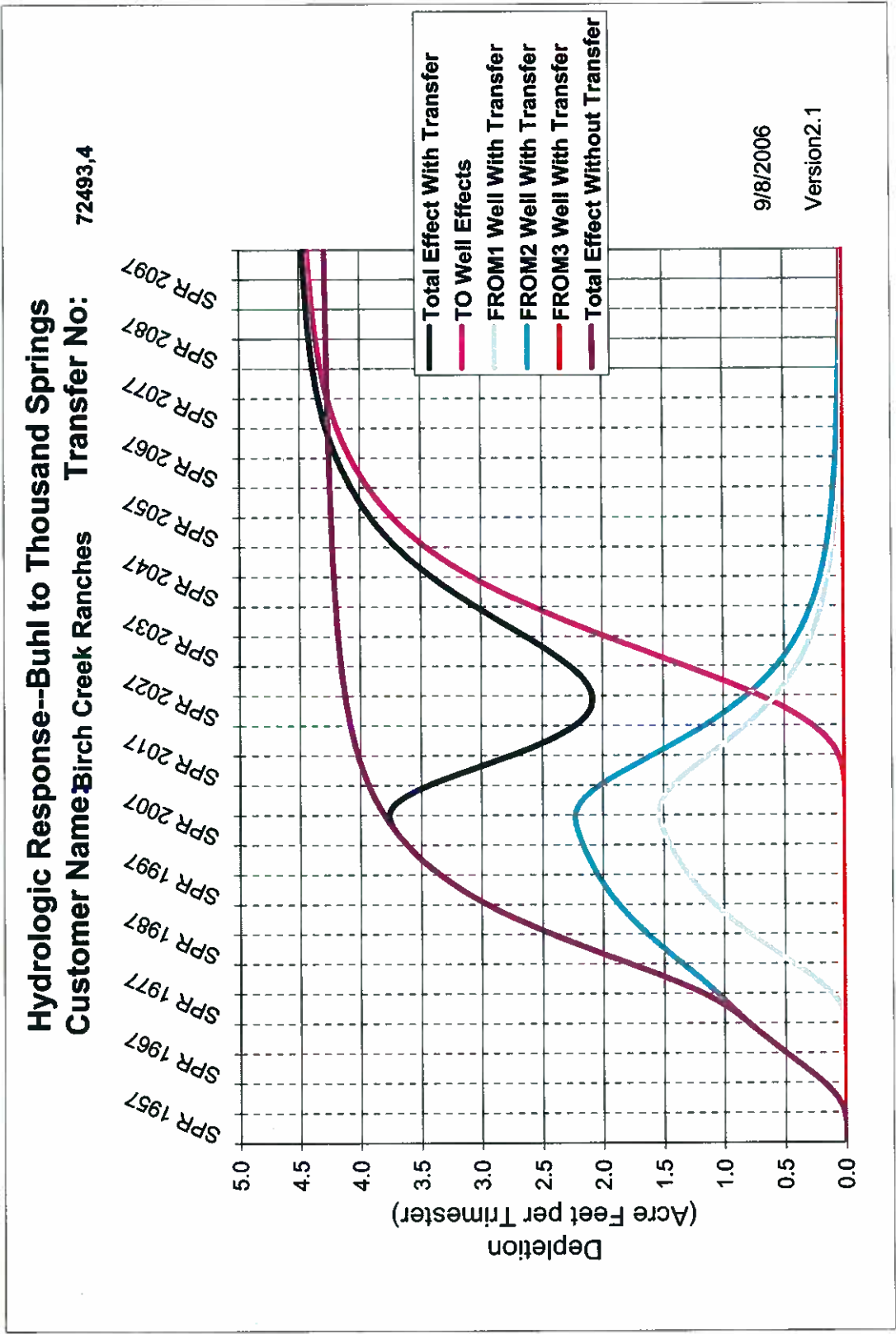


Chart 2.11

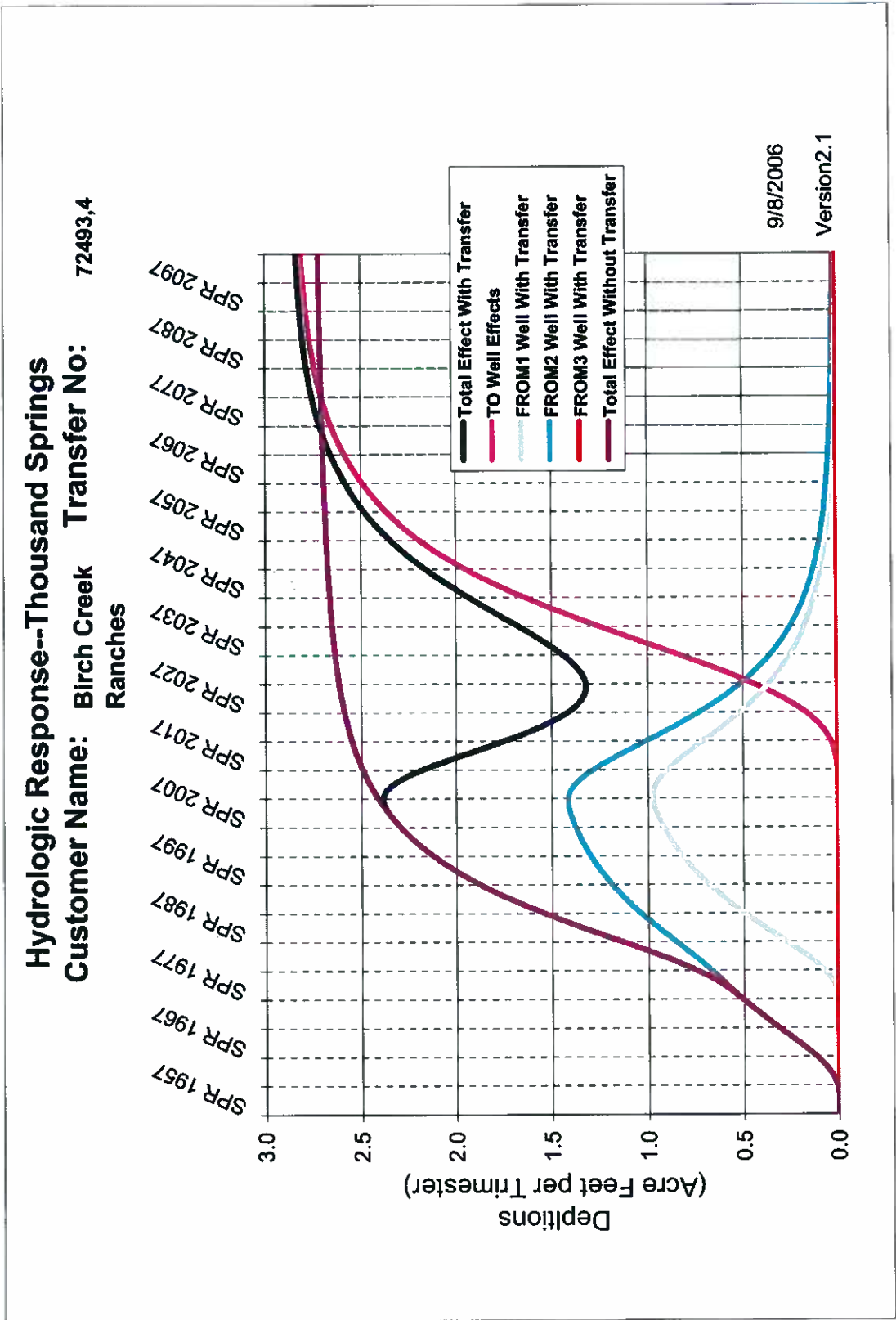


Chart 2.12

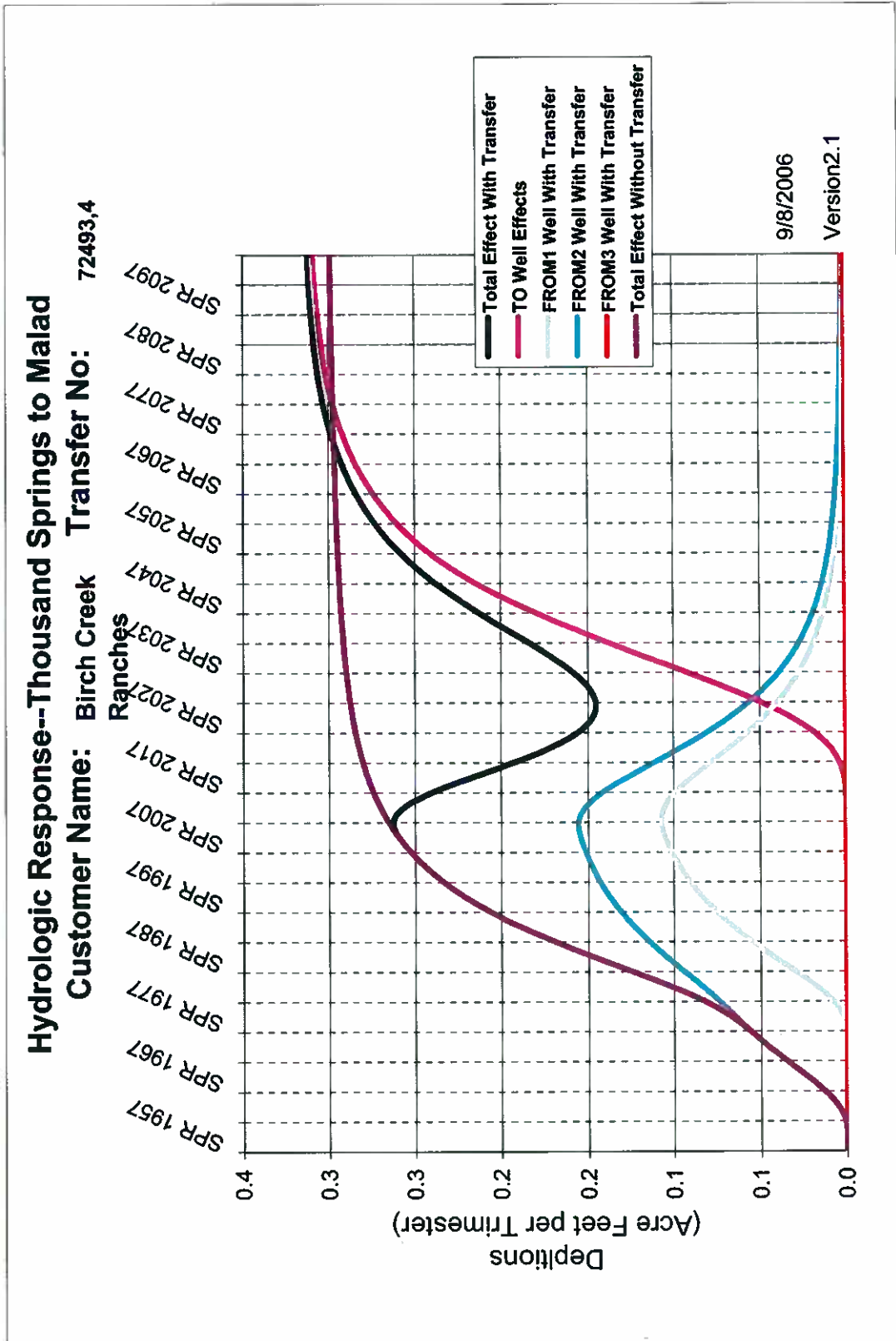


Chart 2.13

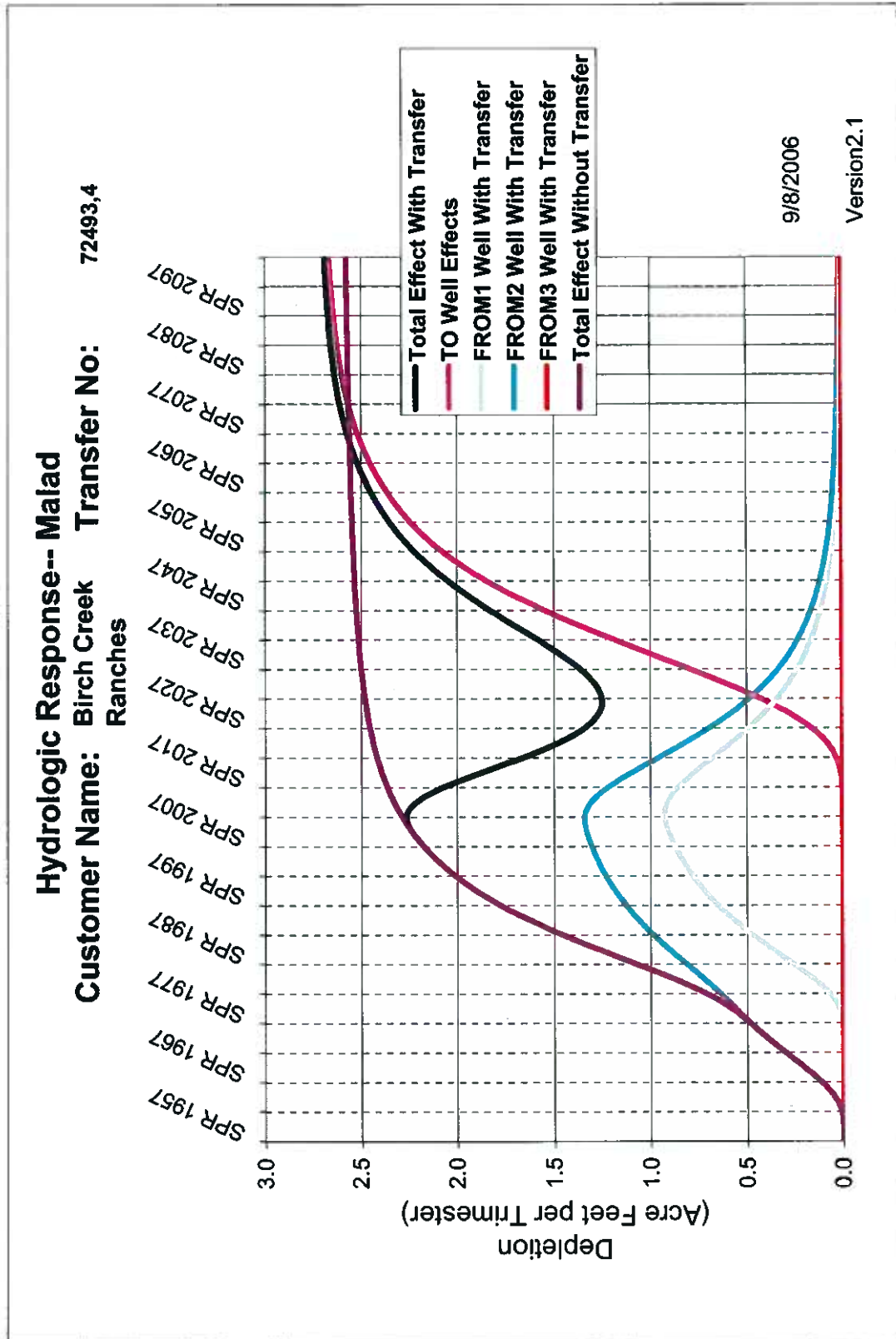


Chart 2.14

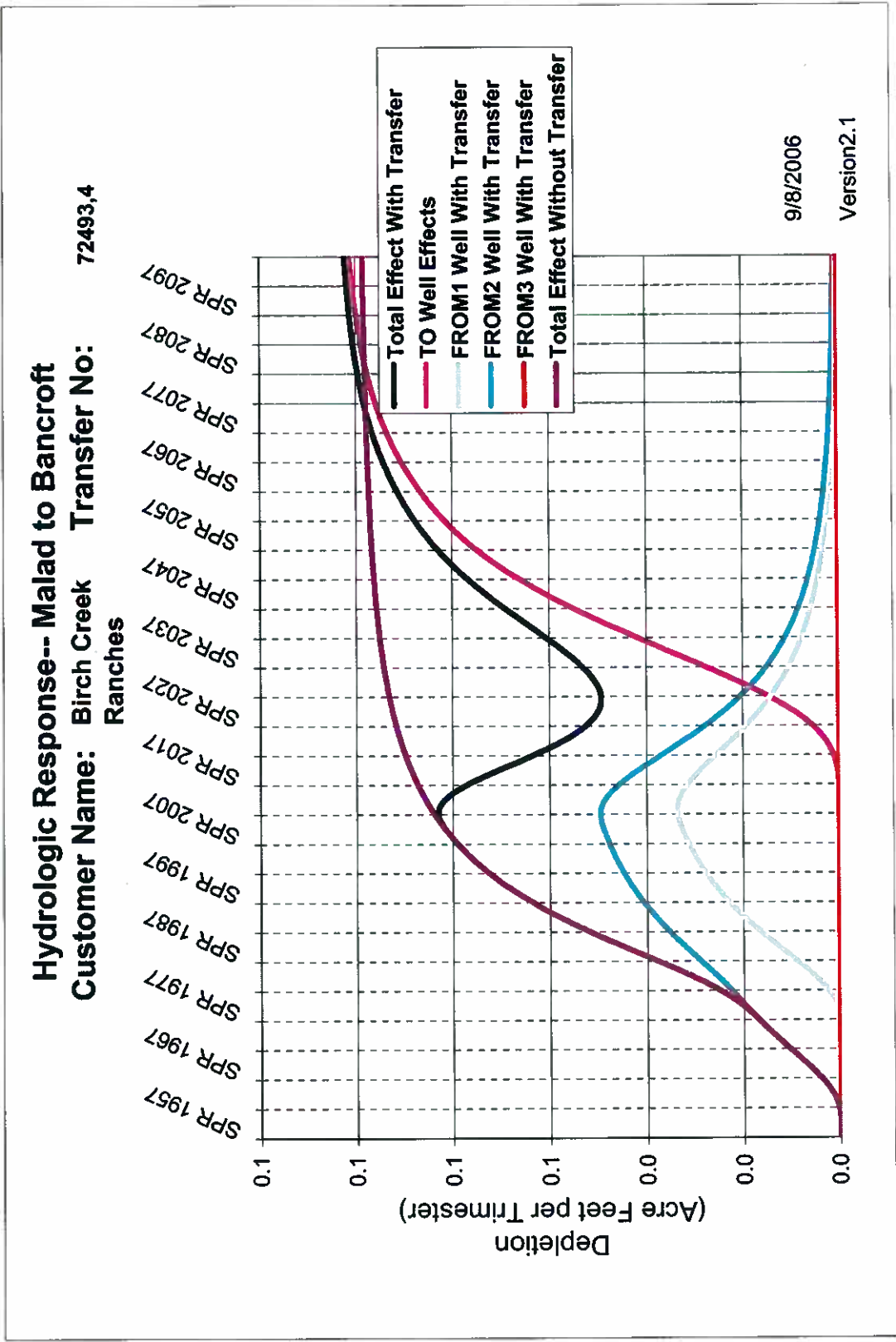


Chart 2.15

Change Below Milner as Ratio of Impact With Transfer to Impact Without Transfer

