158 +/- Acres in Harvey County

Information Packet

78 +/- Acres in the S 1/2 of NW 1/4 of S22, T23, R03W & 80 +/- Acres in the W1/2 of SW 1/4 of S22, T23, R03W

RESULTS REALTY, LLC

620-465-3499

www.ResultsRE.com



MAP LEGEND

Spoil Area	Stony Spot	Very Stony Spot			Special Line Features	L	water reatures Streams and Canals	Transportation	# Rails	Interstate Highways	US Routes	Major Roads	Local Roads	Background	Aerial Photography										
Area of Interest (AOI)	Area of Interest (AOI)		Soil Map Unit Polygons	Soil Map Unit Lines	Soil Map Unit Points	Special Point Features	Blowout	Borrow Pit	Clay Spot	Closed Depression	Gravel Pit	Gravelly Spot	Landfill	Lava Flow	Marsh or swamp	Mine or Quarry	Miscellaneous Water	Perennial Water	Rock Outcrop	Saline Spot	Sandy Spot	Severely Eroded Spot	Sinkhole	Slide or Slip	Sodic Spot
Area of Int		Soils		1		Special	9	Ø	岌	0	×	4 5	0	X	7	¢(0	0	>	+	* *	Û	0	,Q.	B

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting Enlargement of maps beyond the scale of mapping can cause soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Natural Resources Conservation Service Coordinate System: Web Mercator (EPSG:3857) Source of Map:

Albers equal-area conic projection, should be used if more accurate distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Version 12, Sep 8, 2015 Soil Survey Area: Harvey County, Kansas

Soil map units are labeled (as space allows) for map scales 1:50,000 Survey Area Data: or larger. Date(s) aerial images were photographed: Jul 18, 2010-Nov 16,

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Map Unit Legend

	Harvey County, Kan	isas (KS079)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5871	Carway-Dillhut-Solvay complex, 0 to 2 percent slopes	13.7	8.1%
5886	Farnum and Funmar loams, 0 to 1 percent slopes	46.4	27.4%
6330	Carwile fine sandy loam, 0 to 1 percent slopes	109.1	64.5%
Totals for Area of Interest		169.2	100.0%



MAP LEGEND

Capability Class - III	Capability Class - IV	Capability Class - V		Capability Class - VI	Capability Class - VII	Capability Class - VIII	Not rated or not available	Water Features Steams and Canals	organical control of the property of the prope	Rails	Interstate Highways	US Routes	Major Roads	Speed less	Lucal Nodus	Background Aerial Photography									
_	.		•	_	_	_	_	Water			= }	ilable			1000				_	=	=	ilable			
Area of Interest (AOI)	Area of Interest (AOI)		Soil Rating Polygons	Capability Class - I	Capability Class - II	Capability Class - III	Capability Class - IV	Capability Class - V	Capability Class - VI	Capability Class - VII	Capability Class - VIII	Not rated or not available	Soil Rating Lines	Capability Class - I	Capability Class - II	Capability Class - III	Capability Class - IV	Capability Class - V	Capability Class - VI	Capability Class - VII	Capability Class - VIII	Not rated or not available	Soil Rating Points	Capability Class - I	Capability Class - II
Area of Int		Soils	Soil Rat										Soil Rat	}	1	*	*		1	5	5	*	Soil Rat		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Web Mercator (EPSG:3857) Coordinate System:

Albers equal-area conic projection, should be used if more accurate distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Harvey County, Kansas

Soil map units are labeled (as space allows) for map scales 1:50,000 Version 12, Sep 8, 2015 Survey Area Data:

Date(s) aerial images were photographed: Jul 18, 2010-Nov 16,

or larger.

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Nonirrigated Capability Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
5871	Carway-Dillhut-Solvay complex, 0 to 2 percent slopes	2	13.7	8.1%
5886	Farnum and Funmar loams, 0 to 1 percent slopes	2	46.4	27.4%
6330	Carwile fine sandy loam, 0 to 1 percent slopes	2	109.1	64.5%
Totals for Area of Inte	rest		169.2	100.0%

Description

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Rating Options

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Tax Detail Information





Generated: 4/8/2016 12:20:34 PM

Inquiry for BOGNER, DONALD L; TR; ETAL - 600 PRAIRIE LAKE RD

Harvey County Kansas

Tax Year 2015

Description S22, T23, R03W, ACRES 154.85,W1/2 SW1/4	Real	
tion 154	Real Estate	ахТуре
.85,W1/2 SW1/4,	040-065-22-0-00-00-004.00-0	Parcel ID (PIN)
Subdivision	Agricultural Real Estate	Parcel Class

€9	Assess	155	Tax Unit
\$5,253.00	sed Valuation	369	dsn .
134.695	Mill Levy	BURRTON	CITY
\$707.56	Ad Valorem	BURRTON TOWNSHIP	/ Iown
\$104.74	Special Tax	22-23-03W	S-T-R
\$812.30	Total Tax		Block Lot
\$812.30	Total Paid	D237 - 0092	Book Page
No	Deliq.	12031	Trans. Date

Historic Tax Information

Tax Year 2014

	02774	Tax ID
Description	Real Estate	ТахТуре
	040-065-22-0-00-00-004.00-0	Parcel ID (PIN)
Subdivision	Agricultural Real Estate	Parcel Class

S22,
T23,
R03W,
ACRES
155.6,
W1/2 SW1
1/4,

\$4,6	Assessed	155	Tax Unit
\$4,683.00	Valuation	369	USD
116.550	Mill Levy	BURRTON	city
\$545.81	Ad Valorem	BURRTON TOWNSHIP	/ Town
\$22.95	Special Tax	22-23-03W	S-T-R
\$568.76	Total Tax		Block Lot
\$568.76	Total Paid	D234 - 0701	Book Page
No	Deliq.	12301	Trans. Date



Harvey County, Kansas



Common Land Unit // Non-Cropland

Tract Boundary

PLSS

Cropland 'etland Determination Identifiers

Restricted Use

Limited Restrictions

Exempt from Conservation

Compliance Provisions

Tract Cropland Total: 149.77 acres

Displayed over 2015 NAIP

2016 Program Year Map Created October 05, 2015

Farm 4826 Tract 7264

22-23-3W

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

FARM: 4826

Kansas

U.S. Department of Agriculture

Prepared: 4/18/16 9:41 AM

Harvey

Farm Service Agency

Crop Year: 2016

Report ID: FSA-156EZ

Abbreviated 156 Farm Record

Page: 1 of 1

Operator Name		DI E TOUG	~			rm Identifier		Rec	on Number
	CKER IRREVOCA				97	DIV OF 4275			
76	ted with Operato	or:							
CRP Contract N	Number(s): None								
Farmland	Cropland	DCP Croplar	nd WBP	W	RP/EWP	CRP Cropland	GRP	Farm Status	Number of
156.76	149.77	149.77			0.0	0.0	0.0	Active	Tracts
State	Other	Effectiv	re Double					FAV/WR	
Conservation	Conservation	DCP Crop		M	PL/FWP			History	
0.0	0.0	149.77	18.8		0.0			N	
				AF	RC/PLC				
	NONE		ARC-CO WHEAT, SOY	BN		PLC SORGH			Default DNE
			CTAP Tran	PLC	CCC-5				
rop VHEAT		reage	Yield	Yield	CRP Redu	iction			
RAIN SORGHI		3.19 4.84		33	0.0				
OYBEANS		3.37		85 34	0.0				
otal Base Acre				34	0.0				
- Duod Adie		66.4							
ract Number:		escription:	C6, S1/2 NW1/4 & V	W1/2 SW1	/4 22-23-3W				FAV/WR
IA Range Unit									History N
		system is be	ing actively applied	d					IN
Vetland Status	: Tract does no	t contain a w	vetland						
/L Violations:	None								
Farmland	0		DCP					CRP	
156.76	Cropl 149.		Cropland		WBP	WRP/EWP		Cropland	GRP
			149.77		0.0	0.0		0.0	0.0
State Conservation	Oth		Effective DCP Cropland		Double ropped	MPL/FWP			
0.0	0.0		149.77		18.8	0.0			
		Base Acreage		PLC 'ield C	CCC-505 RP Reduction				
Crop									
Crop	AT	73.19		33	0.0				
WHEA	AT N SORGHUM	73.19 34.84		33 85	0.0				
WHEA									

Owners: DONALD L BOGNER REV TR

DUANE J BOGNER REV TR

DAVID J BOGNER

Other Producers: ARLO D BECKER





Wimas Water Right Query



WIMAS Point of Diversion Information Sheet

Water Right Information represents conditions as of 03/21/2016.

Information shown on this page depends on the water right(s) and their Type(s) of Use associated with a PD. If there are multiple water rights and types of use, the page will update details, quantity and rate, and reported water use depending on which entry is selected from those list boxes.

Because water rights can overlap both in points of diversion and places of use (which in turn can affect the authorized quantities and rate) AND water usage is often aggregated into a single report, you cannot determine if a water right has reported more water use than authorized from this page only.

Point of Diversion

PD: 22-23S-3W 2

2 Water Right(s): 30130 - 00

▼ 1 Type(s) of Use: IRR ▼ Google Location Map

WWC5 Links:

27537

WIZARD Link:

None

Water Right Details

Source: G Right Type: A

Total Acres Authorized: 80

Net Acres Authorized: 80

Use of Water Active: Y

Water Right Status: NK

Place(s) of Use: 22-23S-3W SE NW (active) Total Acres: 40, Net Acres: 40

Priority Date: 07/18/1977

Action Trail: 07/18/1977- PENDING INITIAL REVIEW

Point of Diversion Details

PD Active: N

Feet North: 2600

Feet West: 5240

Qualifiers:

County: HARVEY

GMD Num: 2 Number of Wells: 1

Subbasin: LITTLE ARKANSAS RIVER

Stream Number:

Special Use Area(s): BURRTON (IGUCA)

Comment: Created at migration for old water use

Authorized Quantity & Rate

Quantity Stored By:

Authorized Quantity (AF):

Net Quantity (AF):

Rate Stored By:

Authorized Rate (GPM):

Net Rate (GPM):

Reported Water Use

Water Use Year(s): 1990

Total Water Used (AF): 0.00

Graph Water Use History

Water Use Reported on Right Num:

A01949900

Reel Number:

Acres Irrigated: Blip Number:

Metered Quantity:

Meter Unit:

Depth to Water:

Beginning Meter Reading:

Depth of Well:

Ending Meter Reading:

System Type:

Hours Pumped:

Pump Rate:

Date of Measurement:

Date Report Received:

Chemigation Indicator:

Water Use Code:

Crop Code:

Current Water Use Correspondent(s):

Print ASCII Report

WIMAS520160323102557719.txt



Disclaimer

For information on the WRIS/WIMAS database, please contact Jim Bagley. For water right related questions, please contact Ken Kopp. For web page or internet based comments, please contact webadmin@kqs.ku.edu. WIMAS Program updated October, 2005. Data updated daily.







Water Right Query



WIMAS Point of Diversion Information Sheet

Water Right Information represents conditions as of 02/14/2016

Information shown on this page depends on the water right(s) and their Type(s) of Use associated with a PD. If there are multiple water rights and types of use, the page will update details, quantity and rate, and reported water use depending on which entry is selected from those list boxes.

Because water rights can overlap both in points of diversion and places of use (which in turn can affect the authorized quantities and rate) AND water usage is often aggregated into a single report, you cannot determine if a water right has reported more water use than authorized from this page only.

Point of Diversion

PD: 22-23S-3W 5

2 Water Right(s): 19499 - 00

▼ 1 Type(s) of Use: IRR ▼ Google Location Map

WWC5 Links:

27536

WIZARD Link:

None

Water Right Details

Source: G Right Type: A

Total Acres Authorized: 80

Net Acres Authorized: 80

Use of Water Active: Y

Water Right Status: NK

Place(s) of Use: 22-23S-3W NW SW (active) Total Acres: 40, Net Acres: 40

Priority Date: 07/25/1972

Action Trail: 07/25/1972- PENDING INITIAL REVIEW

Point of Diversion Details

PD Active: Y

Feet North: 2600

Feet West: 5125

Qualifiers: NW NW SW

County: HARVEY

GMD Num: 2 Number of Wells: 1

Subbasin: LITTLE ARKANSAS RIVER

Stream Number:

Special Use Area(s): BURRTON (IGUCA)

Comment: NW NW SW-90' E CHG WELL 90' E CHG WELL

Authorized Quantity & Rate

Quantity Stored By: Water Right

Authorized Quantity (AF): 113

Net Quantity (AF): 113

Rate Stored By: Water Right

Authorized Rate (GPM): 965

Net Rate (GPM): 965

Reported Water Use

Water Use Year(s): 2014

Total Water Used (AF): 96.00

Graph Water Use History

Water Use Reported on Right Num:

Reel Number: 88

Acres Irrigated: 148

Metered Quantity:

Meter Unit: 2

Depth to Water:

Blip Number: 6068

Depth of Well:

Beginning Meter Reading: 740

Ending Meter Reading: 837

System Type: 1

Pump Rate:

Date of Measurement:

Date Report Received: 02/25/2015

Hours Pumped:

Chemigation Indicator: Y

Water Use Code: A Crop Code: 49

Current Water Use Correspondent(s):

BOGNER DAIRY

Print ASCII Report



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Water Right Query



WIMAS Point of Diversion Information Sheet

Water Right Information represents conditions as of 02/14/2016.

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Point of Diversion

PD: 22-23S-3W 5

2 Water Right(s): 19499 - 00

▼ 1 Type(s) of Use: IRR ▼ Google Location Map

WWC5 Links:

27536

WIZARD Link:

None

Water Right Details

Source: G Right Type: A

Total Acres Authorized: 80

Net Acres Authorized: 80

Use of Water Active: Y

Water Right Status: NK

Place(s) of Use: 22-23S-3W NW SW (active) Total Acres: 40, Net Acres: 40

Priority Date: 07/25/1972

Action Trail: 07/25/1972- PENDING INITIAL REVIEW

Point of Diversion Details

PD Active: Y

Feet North: 2600

Feet West: 5125

Qualifiers: NW NW SW

County: HARVEY

GMD Num: 2 Number of Wells: 1

Water Right

Subbasin: LITTLE ARKANSAS RIVER

Stream Number:

Special Use Area(s): BURRTON (IGUCA)

Comment: NW NW SW-90' E CHG WELL 90' E CHG WELL

Authorized Quantity & Rate

Quantity Stored By: Water Right

Authorized Quantity (AF): 113 Authorized Rate (GPM): 965

Net Quantity (AF): 113

Net Rate (GPM): 965

Reported Water Use

Rate Stored By:

Water Use Year(s): 2014

Total Water Used (AF): 96.00

Graph Water Use History

Water Use Reported on Right Num:

Reel Number: 88

Acres Irrigated: 148 Blip Number: 6068

Metered Quantity:

System Type: 1

Meter Unit: 2

Depth to Water:

Depth of Well:

Beginning Meter Reading: 740

Ending Meter Reading: 837

Date of Measurement:

Date Report Received: 02/25/2015

Pump Rate:

Chemigation Indicator: Y

Water Use Code: A

Crop Code: 49

Current Water Use Correspondent(s):

Hours Pumped:

BOGNER DAIRY

Print ASCII Report



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Wimas Water Right Query



WIMAS Query Results

Summarize Quantity Development Trends Water Use Trends

Create Map

Start New Query Download Data

Water Right Information is current as of 02/14/2016 You have the following filters in place:

Township = 23 Range = 3 Range Direction = W Section = 22

County(s) = 'HV'Use(s) Made of Water = 'IRR'

Water Source = G Appropriated and/or Vested Water Rights = Yes

WIMAS 5 User Manual

There are 4 unique water rights and 6 unique points of diversion selected. Only 50 records are displayed at one time. Records can be sorted ascending (asc) or descending (desc) which will affect ALL the records in the selection set.

Filter for only Active Non/dismissed Water Rights

				View R	Records: 1	1-8				
Wr File Number asc desc	Use of Water asc desc	Use of Water Active asc desc	Source asc desc	Priority Date asc desc	Wr Status asc desc	Pdiv Location (twp rng sect qual id) asc desc	Longitude asc desc	Latitude asc desc	County asc desc	Pdiv Active asc desc
14844 00	IRR	Y	G	20-MAR- 1968	NK	23S 3W 22 NCSE 1	-97.63308	38.032333	HV	N
14844 00	IRR	Y	G	20-MAR- 1968	NK	23S 3W 22 NCSE 6	-97.633	38.03241	HV	Y
19499 00	IRR	Y	G	25-JUL- 1972	NK	23S 3W 22 NWNWSW 5	-97.646256	38.03584	HV	Y
19499 00	IRR	Υ	G	25-JUL- 1972	NK	23S 3W 22 2	-97.646655	38.035841	HV	N
21059 00	IRR	Y	G	23-JUL- 1973	NK	23S 3W 22 NCN2NE	-97.633056	38.041415	HV	N
21059 00	IRR	Υ	G	23-JUL- 1973	NK	23S 3W 22 NCN2NE		38.04142		Y
30130 00	IRR	Y	G	18-JUL- 1977	NK	23S 3W 22 2	-97.646655	38.035841	HV	N
30130 00	IRR	Υ	G	18-JUL- 1977	NK	23S 3W 22 NWNWSW 5	-97.646256			Y



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108-5/2 NW 30130 113- W/2 SW 19499



1000 Corey Road P.O. Box 886 Hutchinson, KS 67504-0886 620-665-5661 FAX: 620-665-0559 TOLL FREE: 877-464-0623 www.sdklabs.com

Page 1 of 1

Sample #

716.16

Sample:

Water

Other ID:

Bogner Dairy

David Bogner

19019 S. Haven Road Haven, Ks 67543

Date Received:

Date/Time Sampled:

Date Reported: Total Fee:

02/16/2016

2/15/2016 5:30:00

02/18/2016

\$35.00

ANALYSIS

++pH - SM 4500-H+ B	Result	Units	Date/Time Analyzed	Analyst
++Chloride - SM 4500-Cl B ++Total Hardness - SM 2340B ++Nitrate-Nitrogen - SM 4500-NO3 D	6.79 434.00 424	s.u. mg/L mg/L	2/17/2016 14:24 2/17/2016 11:30	SE SE
+-Magnesium - SM 3111B +-Sodium - SM 3111B +-Sulfate - SM 4500 SO4 E % Sodium	Less than 1.0 130.00 24.10 150.00 43.00	mg/L mg/L mg/L mg/L mg/L	2/16/2016 14:40 2/17/2016 09:15 2/17/2016 09:15 2/17/2016 09:15 2/16/2016 16:00	SE JC/CB JC/CB JC/CB SE
TDS-Total Dissolved Solids - Calculated Irrigation Quality Rating Light Soil -Salinity Hazard	49.30 3.162 1700 1206 AS FOLLOWS Medium	% s.u. umhos/cm mg/L	2/18/2016 08:00	SE
Light Soil - Sodium Hazard Medium Soil -Salinity Hazard Medium Soil -Sodium Hazard Heavy Soil -Sodium Hazard Heavy Soil -Sodium Hazard Heavy Soil -Sodium Hazard	Medium Medium Medium High Medium			
General Comment: **Sample receipt temperature = 21.1 degrees C **Sample beyond hold time for pH.	High Good to Permissible			

^{*} Denotes analysis was subcontracted to another laboratory for state compliance - see attached.

Approved By:



Methods of analysis per EPA-600 or EPA SW-846, 3rd Ed., 1986 or Standard Methods for the Examination of Water and Westewater, 18th Edition, 1992.

⁺⁺Denotes NELAP/KDHE Accredited Method. Lab Certificate #E-10152. Results meet all requirements of NELAC unless noted.

Servi-Tech Laboratories

1816 E. Wyatt Earp • PO Box 1397 • Dodge City, KS 67801

www.servitechlabs.com

Phone: 620.227.7123

800.557.7509

Fax: 620.227.2047

Page 1 of 2

	Send To: FARMERS COOP GRAIN AND MERC 302 WEST FIRST HALSTEAD, KS 67056		Sec 22 well			Report Date: 09/26/2014 08:33 am Sean H. Jenkins		
Project ID: Project Title: Sample ID: Client Name: Subject: Location: Depth:	ORVILLE BECKER Irrigation Water Lab Analysi IRRIGATION	s	Date/Time Recei Name of Submi Date/Time Samp Name of Samp Invoice		usps 09/15/2014 11:30 am ORVILLE BECKER 361384			
Analysis		Res	Result Unit Ac		lbs / re Inch meq / L			
Nitrate Nitrogen, NO3-N Chloride, CI Sulfate, SO4 Sulfate-Sulfur, SO4-S Bicarbonate, HCO3 Carbonate, CO3 Hydroxide, OH Total Alkalinity, CaCO3 Hardness (CaCO3) Hardness (CaCO3) Total Calcium, Ca Total Magnesium, Mg Total Potassium, K Total Sodium, Na Sodium Adsorption Ratio, SAR Adjusted SAR, SARa Sodium Percentage Total Boron, B Total Iron, Fe Total Manganese, Mn Electrical Conductivity, EC Total Dissolved Solids (Calc), TDS pH, at 23.9°C pHc Corrosion Indices Langlier Index, At		<0.1 430 33 11 86 <10 <10 71 420 25 130 23 5 120 2.5 4.6 38.0 0.09 9.0 0.79 1480 947 6.4 7.6	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	2	<0.0 97.5 7.5 2.5 19.5 <2.3 6.1 9.5 5.2 1.1 7.2	<0.0 12.1 0.7 0.7 1.4 <0.3 <0.6 1.4 6.5 1.9 0.1 5.2		
	dex, Al Result Notes as received and analyzed out	10.9	atory holding time f	or this	analyte			

Report formatted for regulatory compliance available upon request.

Servi-Tech Laboratories

1816 E. Wyatt Earp • PO Box 1397 • Dodge City, KS 67801 www.servitechlabs.com

Phone: 620.227 7123

800.557.7509 Fax: 620.227.2047

Lab #. D-2014NL006363 Sample ID: LABORATORY REPORT
Client Name: ORVILLE BECKER

Report Date: 09/26/2014 08:33 am

Location: IRRIGATION

Interpretations for Corrosive Indices

LANGLIER SATURATION INDEX (LSI) indicates the CaCO3 saturation of a given water supply. A negative index value (less than -0.5) suggests the water considered "corrosive", having a tendency to dissolve CaCO3 with little to no potential to form scale

AGGRESSIVE INDEX (10.0 to 12.0): Indicates that this water is moderately aggressive and maybe prone to cause corrosion in pipes and metal fixtures.

The Langlier Index and Aggressive Index can be used as indicators of the potential corrosivity of water. Other factors that affect corrosivity may be present and not included in this test.

Interpretations For Irrigation Use

GENERAL RATING - ACCEPTABLE QUALITY IRRIGATION WATER

SALINITY HAZARD: LOW. Extended use of this water for irrigation could affect growth of very salt sensitive crops, especially if conditions allow salts to accumulate in the active rooting zone.

PERMEABILITY HAZARD: LOW. The adjusted SAR value suggests few use restrictions, but this water should be used with moderate caution for extended irrigation of fine-textured or medium-textured soils, especially clayey soils. Symptoms of excess sodium accumulations include surface crusting or reduced water infiltration rates. If these symptoms occur, occasional applications of soluble calcium material (e.g., gypsum) or other soil management strategies may be needed. Test the soil routinely for exchangeable sodium (%Na) and the irrigation water for adjusted SAR to monitor sodium levels.

BORON HAZARD - NONE: Safe for nearly all crops.

CHLORIDE HAZARD FROM SPRINKLER IRRIGATION - VERY HIGH (350 - 550 mg/L): Chloride contained in water droplets that dry on leaf surfaces may cause foliar injury (burning, spotting, etc.) when applied to moderately tolerant crops (e.g. alfalfa, corn). Foliar injury may be severe in sensitive and moderately sensitive plant types. Chloride injury problems are likely to be more common during high temperature and low humidity conditions. Irrigate at night or during cool weather conditions, if possible. Increasing droplet size or applying water below the crop canopy can help minimize problems.

pHc: pHc values above 8.4 indicate a tendency to dissolve lime from soil through which the water moves; values below 8.4 indicates a tendency to precipitate lime from water applied.



Specific Well--15-079-00061

All Well Data

API: 15-079-00061 KID: 1002920664 Lease: Webb

Well: 1

Original operator: TEXACO Inc Current operator: Ressler Well Service, Inc. Status: Producing

Field: Burrton Northeast Location: T23S R3W, Sec. 22

SE SE NW

3300 North, 3300 West, from SE corner

Longitude: -97.6399319 Latitude: 38.0377411

Lat-long calculated from footages

County: Harvey

Opal Webb on log (AB 2-28-00)

View well on interactive map

Permit Date:

Spud Date: Jun-11-1959

Completion Date: Jul-22-1959 Plugging Date: Jun-30-1959

Well Type: OIL-P&A

Total Depth: 3423 Elevation: 1450 KB **Producing Formation:**

IP Oil (bbl): IP Water (bbl): IP GAS (MCF):

KDOR code for Oil: 106069

KCC Docket No.:

Wireline Log Header Data

Logger: Schlumberger

Tool: Sonic Log

Operator on log TEXACO Inc **Top:** 2500; **Bottom:** 3417 Log Date: Jun-18-1959

BHT: 103F Gamma Ray:

Spontaneous Potental: Y Holdings at: Lawrence

Logger: Schlumberger Tool: Electrical Log

Operator on log TEXACO Inc **Top:** 329; **Bottom:** 3419 Log Date: Jun-18-1959

BHT: 103F Gamma Ray:

Spontaneous Potental: Y Holdings at: Lawrence

For information on software to view and use the files we distribute on our web pages, please view our File Format Tools page.

Cuttings Data

Box Number: 55119 Starting Depth: 2440 Ending Depth: 3423

Skips: 2760-2770, 3320-3322, 3350-3360, 3420-3423

Oil Production Data

This well has been linked to an oil lease.

Information from Outside Sources

Please note: The link below takes you away from the web site of the Kansas Geological Survey to the website of the Kansas Geological Society, a library in Wichita. The Survey can not help with information presented by the Walters Digital Library.

From Kansas Geological Society's Walters Digital Library

Kansas Geological Survey, Oil and Gas Well Database Comments to webadmin@kgs.ku.edu URL=http://www.kgs.ku.edu/Magellan/Qualified/index.html Well Display Program Updated Jan. 2008. Data added continuously.