1R - 425-7

REPORTS

DATE:



Vacuum Jct C-7 2009

1R425-7

RECEIVED

APR - 6 2010 Environmental Bureau Oil Conservation Division

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CLOSURE

12 ft, 30 ft

APR - 6 2010

RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

DOVIDOATION

Environmental Bureau Oil Conservation Division

				BOX LOCA	HON						
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DI	MENSIONS	- FEET		
						400	0.5.5	1	Length	Width	Depth
Vacuum	Jct. C-7	С	1	18S	35E	Lea -		eliminated	· · · · · · · · · · · · · · · · · · ·		
LAND TYPE: BLM STATE X FEE LANDOWNEROTHER											
Depth to Grour	ndwater	100	feet	NMOCE	SITE ASS	ESSMENT F	RANKING S	CORE:	10		
Date Started	3/1/2	2006	Date Cor	mpleted	2/9/2009		Vitness	no			
Soil Excavated	177.8	cubic yar	ds Exc	avation Ler	ngth 20	Width _	20	Depth	_ <u>12</u> feet		
Soil Disposed	120	cubic yar	ds Off	site Facility	Sund	lance	Location	Eunic	e, NM		

FINAL ANALYTICAL RESULTS: Sample Date 10/3/2006, 2/9/2009 Sample Depth

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene Toluene Ethyl Benzene Total mg/kg mg/kg mg/kg m				GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.		PID = 0).0 (field)		28.5	974	64
BOTTOM COMP.	<0.005	<0.005	0.134	0.097	138	1370	<16
BACKFILL COMP.		PID = 0).0 (field)		13.2	960	64
SOIL BORE #1 @ 30'		PID = 1	.9 (field)		<10	<10	16

General Description of Remedial Action: This junction box was addressed as part

of the Vacuum SWD System abandonment. After the former junction hox was removed

CHLORIDE FIELD TESTS

of the vacuality over bystern abalidonment. After the former junction box was removed
an investigation was conducted using a backhoe to excavate the site to dimensions of
20x20x12-ft deep. Representative composite samples were collected and sent to a
commercial laboratory for analysis of chloride, TPH, and BTEX. The laboratory confirmed
low concentrations of chloride but slightly elevated concentrations of TPH. The excavated
soil was blended on site with clean, imported soil. The blended backfill was then returned
to the excavation to ground surface and contoured to the surrounding area. On 3/20/2006
the site was seeded with a blend of native vegetation and is expected to return to a
productive capacity at a normal rate. To further investigate depth of TPH presence, a soil

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	329
bottom comp.	12'	421
SOIL BORING	15'	148
at the former	20'	122
junction	25'	87
(2/9/2009)	30'	117

boring was initiated on 2/9/2009 at the former junction box location. The boring was advanced to a depth of 30 ft BGS while soil samples

were collected every 5 ft and field tested for chlorides and organic vapors. The 30 ft sample was analyzed by a commercial laboratory for

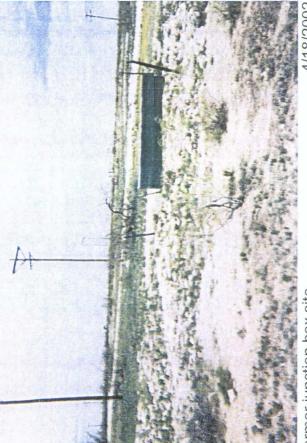
chloride and TPH which confirmed low concentrations of each. The entire borehole was plugged with bentonite to the ground surface.

enclosures: photos, lab results, PID (field) screenings, boring log, BTEX comparison study, chloride curve

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

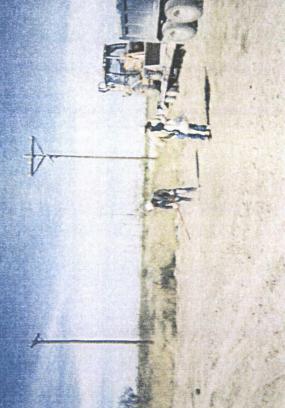
SITE SUPERVISOR	Roy Rascon	SIGNATURE		not available		COMPANY	RICE OPERATING COMPANY
REPORT ASSEMBLED BY	Katie Jones	INITIAL	K)				
PROJECT LEADER _	Larry Bruce Baker Jr.	SIGNATURE	Lany	Bruce	Baker Ki	DATE_	11-13-09





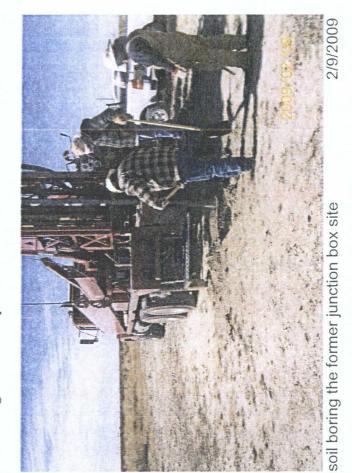


4/18/2002



Unit C, Section 7, T18S, R35E





seeding backfilled site

11/6/2006



PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOB8S, NM 88240

ANALYTICAL RESULTS FOR RICE OPERATING CO. ATTN: ROY R. RASCON 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (505) 397-1471



CI*

(mg/Kg)

Receiving Date: 10/05/06 Reporting Date: 10/09/06 Project Number: NOT GIVEN Project Name: VACUUM JCT. C-7 Project Location: NOT GIVEN

Sampling Date: 10/03/06 & 10/04/06 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC/HM

GRO DRO (C₆-C₁₀) (>C₁₀-C₂₈) (mg/Kg) (mg/Kg)

LAB NUMBER SAMPLE ID

ANALYSIS D	DATE	10/08/06	10/08/06	10/09/06
H11619-2	BTTM FIELD COMP. @ 12'	138	1370	<16
H11619-3	BACKFILL COMP.	13.2	960	64
H11619-4	4 WALL COMP. 20'x20'	28.5	974	64
Quality Cont	rol	769	784	490
True Value (2C	800	800	500
% Recovery		96.1	98.0	98.0
Relative Per	cent Difference	2.4	1.2	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI': Std. Methods 4500-CI'B *Analyses performed on 1:4 w:v aqueous extracts.

Chemist 1 1

H11619A

PLEASE NOTE: Liability and Damages: Cardinal's hability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be immed to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsdever shall be beened waived unless made in writing and received by Cardinal within thirty (30) days after completion of the upsticuble service. In or event shall Cardinal be liable for incidentian or consecutarial damages, including, whether such stations, business interruptions, loss of use, or loss of profils incurred by client, its subsidiaries, affiliates or successors insing but of or related to the performance of services hereunder by Cardinal, regardless of whether such stations are upon any of the above-stated reasons or otherwise



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ANALYTICAL RESULTS FOR RICE OPERATING CO. ATTN: ROY R. RASCON 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (505) 397-1471

Receiving Date: 10/05/06 Reporting Date: 10/09/06 Project Number: NOT GIVEN Project Name: VACUUM JCT. C-7 Project Location: NOT GIVEN



0CT 1 7 2006

Sampling Date: 10/03/06 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC

			ETHYL	TOTAL
	BENZENE	TOLUENE	BENZENE	XYLENES
LAB NO. SAMPLE ID	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
ANALYSIS DATE	10/06/06	10/06/06	10/06/06	10/06/06
H11619-1 COMPOSITE, BTTM #1-#5	<0.005	<0.005	0.500	0.360
H11619-2 BTTM FIELD COMP. @ 12'	<0.005	<0.005	0.134	0.097
Quality Control	0.104	0.099	0.102	0.300
True Value QC	0.100	0.100	0.100	0.300
% Recovery	104.0	98.9	102	100.0
Relative Percent Difference	0.7	<0.1	1.3	3.9

METHOD: EPA SW-846 8260

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ARDINAL LABORATORIES, INC. 2111 Beachwood. Abllene, TX 796

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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1 101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476	1118	P.O. #:	Company:	zip: SSごぐO Attn:	12 h 7	city:	State: ZIp:		Fax #:	MATRIX PRESERV.	ובא נבא	NTAINE NUDWA TEWATE SOCE SA SA SA SA SA SA SA SA SA SA SA SA SA	000 ¥									halher besed in contrait of tort stall be limited to the amount put by this citent for the do in withy and resolved by Cardoni with 30 days area completion of the applicable	a kromploon, kee of use, or kee of poons boured by chert, ke ubhildeder, when kun delm is based room my of the phone inited footoors of attendes.	Kecelved by:	Roce/Wed By: (Lab Staff) // // // //	Burn 21 M S Cherles 3
z 111 Beechwood, Abliene, 1X 79603 (325) 673-7001 Fax (325) 673-7020	:; _2;	Kay R. RAJEON	a. Twylar	State: 265 249.	· 7/24 Fax#: 3972-	30 Kaculton Del Project Owner:		statistics and the second s	Contraction of the			Sample I.D.		111 - 117 - 1	24.60	# 7	 N #1.5	Field Crap. @ 12'	BACKEN Carp.	4 wall Comp. 20'1 20'		FLG SE HOFE. Likeling and Complete Conducts Abulty and Chent's actions formery but any chain anology Mether (seech mech and any chain anology and received an contract another the section contract and the section of the	renter. Into verse wal cut and a bade fit is kulouful of carcepted using a privat finition, batter i templon, feat of peak beard by diet, fa shiddala, states a succession with our of verded to the patternance of sortical templots. For any other wall, it have donn in how total resease of devices. Sarry to FOI for nit of forth.	$D_{A(e_1)}$	- Date:	Time:
	Company Name:	Project Manager: 🖗	Address: /200 (1	City: 11. 645	Phone #: 5775	Project #: FHB-BC	Project Name:	Project Location:	Sampler Name: 🦯	FOR LAB USE ONLY		Lab I.D.		1-11611-1				;				FLEASE ROTE: LEQUITY and Oa anayooo, Ad clatta Ankaday dhoo	actice. It for stark stat catching. #fficies of succession states, ord of Catching at Fight		Ralinquished By:	

Cardinal cannot accept verbal changes. Please fax written changes to (325) 673-7020.

RICL OPERATING COM. ANY

122 West Taylor Hobbs, NM 88240 Phone: (505) 393-9174 Fax: (505) 397-1471

VOC FIELD TEST REPORT FORM

PID METER READING & CALIBRATION

CK. MODEL: PGM 761S MODEL MODEL: PGM 761S NO. MODEL: PGM 7600 LOT NO: 2772 FILL DATE: 77-372 ACCURACY: +/- 2% SERIAL NO: 104412 SERIAL NO: 104490 SERIAL NO: 110-12383

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

CONFERENCE EXP. DATE: <u>5726007</u>

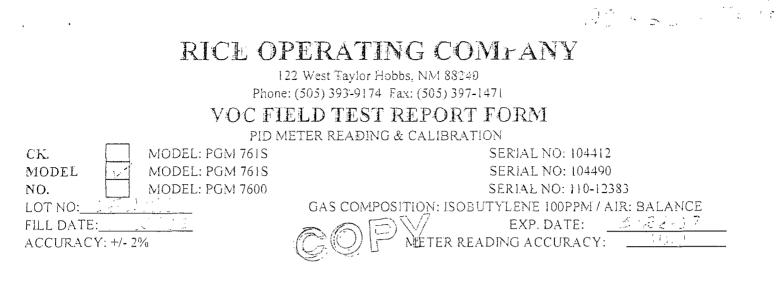
SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Vassur	J.A. 9-7		7	18	3£

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I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE:

DATE: _____



SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
	J. A. Z		1 		

SAMPLE D. How	PID Results	Sample 16 . June /	PID Results
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			124

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE:

DATE:

2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

Cardinal Laboratories

Laboratory:

Roy Rascon

Date: Sampler:

Vacuum Jct. C-7

System: Site:

10/3/2006

Component (ppm) Benzene Toluene 1 884 884 1 2 414 1 3 649 <0.005 <0.005 5 489	location	Component	PID reading	LL.	FIELD COMPOSITE	SITE (mg/kg)	(f
1 884 2 414 3 649 4 939 5 489	LUCAUUI	COLINOLIE	(mdd)	Benzene	Toluene	Ethyl Benzene Total Xylenes	Total Xylenes
2 414 3 649 <0.005 4 939 <0.005		1	884				
3 649 <0.005 4 939 <0.005 5 489	bottom	2	414			<u> </u>	
4 7	composite at	e	649	<0.005	<0.005	0.134	0.097
5 489	12 ft BGS	4	939				
		5	489				
LAB COMPOSITE					LAB COMPOSI	TE (mg/kg)	(

0.360

0.500

<0.005

<0.005

laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under Revised Junction Box Upgrade Work Plan (July 16, 2003) collected in a skewed 'W' pattern.

Ĩ	Logger:		Tony Grieco	C	ent:	·····	Well ID:
	Driller:	1	Harrison & Cooper, Inc. Drilling		RICE Operating (Company	
Drilli	ng Method:		Air rotary	Pro	oject Name:	l	
	Start Date:		2-9-09		Vacuum jet.	C-7	
	End Date:		2-9-09	_Lo	cation:		SB - 1
Comm	ients:				Vacuum SWD	Svstern	05 1
Ì	Located:	center	of former junction box site				
				ur	nit 'C' Sec.7 ⊺1		
	TD = 30 ft		GW = 100 ft		Lea County.		
Depth		PID	Description		Lithology	1	oil Bore struction
(feet)	field tests			_			
						120.18	
15	148	105.1					
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			VERY FINE TO FINE SAND			and the second sec	
20	122	46.5	dry				bentonite
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25	87	4.4					
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30	117	1.9					
DRO					<u>}</u> _	<u> </u>	<u>د</u> ا
GRO	<10, <10						
Lap Ci-	16						

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ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER! 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 02/10/09 Reporting Date: 02/27/09** Project Owner: NOT GIVEN Project Name: VACUUM C-7 Project Location: NOT GIVEN



Sampling Date: 02/09/09 Sample Type: SOL Sample Condition: COOL & INTACT Sample Received By: ZL Analyzed By: AB/HM

GRO	DRO	
(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₆)	CI*
(mg/kg)	(mg/kg)	(mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE	02/10/09	02/10/09	02/10/09
H16865-1 SB #1 @ 30'	< 10.0	<10.0	16
Quality Control	549	562	500
True Value QC	500	500	500
% Recovery	110	112	100
Relative Percent Difference	3.0	7.1	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CIT: Std. Methods 4500-CITB *Analysis performed on a 1:4 w:v aqueous extract.

**Revised Report. Chamist

Oate

H16865 TOL RICE

PUEASE NOTE, Liability and Damages. Cardinal's liability and plient's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable Air claims, including alose of hegigence and any oner cease mataceners mate ware runess made it winning and received by Cardinal warm times of correct sources are completed on the subsidiaries, including, without linuation, business interruptions, loss of york in this incurred by client, it is subsidiaries, adfiliates or successors arising out of or related to the performance of territors hereunder by Cardinal, regardless of wheners such daim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified body. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

(505) (505)	2326 FAX (505	4/b (325) 5/3-/001 FAX (325)6/3-/020	ax (325)6/3-/020		ANALYSIS REDIJEST
Project Manager: 14 AC H					
	1				
Address:			Company:		
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Phone #:	3 93.917 4 Fax #: 3 971	17471	Address:		
Project#:	Project		City:		
Project Name:	WACOUNT C-7		State: Zip:		
Project Location:			Phone #:		(
Sampler Name:	TONY OFIC	.co	Fax #:		
דעוג נאם ועמב סנוד ו 		MATRIX	PRESERV SAMPLING		
Lab I.D.	Sample I.D.	ROBAR OR (C) MR. ROUATINERS ROUATAWATER MASTEWATER NOS DIL DIC SUDGE	отнея : kold/base: rce / соос тек : DATE DATE	TME H2/2	
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PLEASE NOTE: Lucling analyses, etclanta, includud scivics, itrin scent shall Va utilicita ur successors and	PLEASE NOTE: Lucking and Durington. Curdington and charts exclusive remedy for any starm orising whether based in outward or for a mount paid or for direct for the mustress. It is used in an including to see for regigners and any operational and and the second or the provided for the anomatical or the applicable and second. It is accorded for the formation of manages, including without funded to the original within 30 days after confidence of the applicable and second. It is accorded for the formation of manages including without funded to the original within 30 days after confidence and second and the original or included to the applicable of the applicable of the original second provided to the original to the applicable and second or the original or an exceedence of the original second exceeded reproves after theorem of the original second provesting of the original to the original or the applicable and accorded and or or related to the original resonance of counties. The original second provesting of the original second provesting of the original second provesting of the original to the original second provesting of the original second original second provesting of the original second origin	ו מוץ כלגות מולגות אוינותכו למשכל וה סטועם. כ מפרוחכיל אפואסיל נוחופאג made in writing גו וון אונווטנו (וומופעטה, טעגווביגא ווובותוקוטנוא כמינונוסו, ופעמולוכאא עו אויכעופו אנינו כלמוח.	et or tort, shalt be limited to the annum pield. Int received by Cardinal within 30 days after r thse of use, or tues of profils incurred by cite its based upon any or the above stated reas	by the ditent for the completion of the applicable ant, its subsidiance one of otherwise.	
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	Time:			Lucarri	WAIN heimer (rice side con
Delivered By:	1	Sample Condition Cool Intact	tion CHECKED BY: (Initials)	h conclerc	h concler readers weth com
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

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RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240 PHONE: (575) 393-9174 FAX: (575) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM



Check Model Number:



Model: PGM 7300 Serial No: 590-000183 Model: PGM 7300 Model: PGM 7300

Serial No: 590-000508 Serial No: 590-000504 Model: PGM 7600 Model: PGM 7600 Model: PGM 7600 Serial No: 110-023920 Serial No: 110-013744 Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 100.0002.020	EXPIRATION DATE: $9/11/09$
FILL DATE:	METER READING ACCURACY: 100

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	C-7	С	7	18 s	3.5 E
SOILB	ORE #1	32°4	12.082'N	103° 29,933' 4	ມ
SA	MPLE ID	PID	SA	MPLE ID	PID
/	'5'	105.1	· · · · · · · · · · · · · · · · · · ·	······································	
	20'	46.5			
	25'	4.4			
· · · · · · · · · · · · · · · · · · ·	30'	1.9			
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I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATUE: 766

DATE: 2/9/09

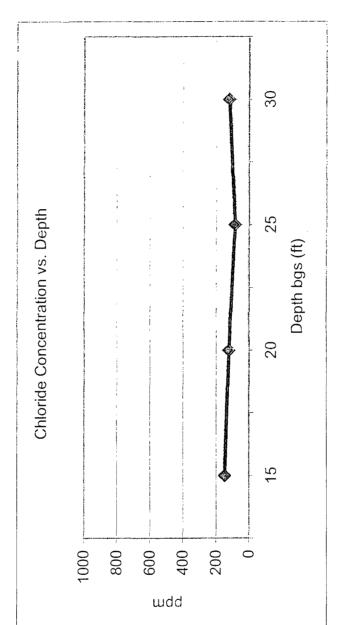
CHLORIDE CONCENTRATION CURVE

RICE Operating Company

Vacuum Jct. C-7 Unit 'C', Sec. 7, T18S, R35E

SOIL BORING samples at the junction (source)

	148	122	84	117
Depth bgs (ft)	15	20	25	30



Groundwater = 100 ft