6.0 BUILDING M0131: BEAVER CREEK RCMP DETACHMENT6.1 Description of Existing Water Supply System

Building M0131, the Beaver Creek RCMP Detachment is currently served by a water supply system that delivers water from a 30.5 m deep well. The well is located in a pit approximately 20 m northwest of the RCMP detachment building. The well location and other details about the surrounding area are provided in Figure M0131-A in Appendix A6. The coordinates of the wellhead, as measured by a handheld GPS device, were recorded as:

- 28 -

- UTM ZONE 7
- Northing: 6916890
- Easting: 506480

There is no treatment or disinfection system for the water supplying this system. There is a 900 L water storage tank located in a room in the rear of the detachment that was installed when a water line between the well and the building froze during a previous winter. A schematic detailing the water system is provided as Figure M0131-B in Appendix A6.

6.2 Description of Existing Wastewater Systems

The septic system for this site was not located during the water system assessment. There are septic lines that were observed to have entered the ground underneath the detachment, but it is unknown in what direction they went and there are neither septic pump outs nor clean-outs observed on the property.

6.3 Water Quality Results

6.3.1 Water Quality Results from Previous Sampling

Bacteriological

Three samples were collected from the Beaver Creek RCMP Detachment water system between September 2004 and June 2005 and were tested for total coliform and *E. coli* by Yukon Environmental Health Services using the presence/absence test method. Results are tabulated in Table M0131-1 in Appendix A6. Coliform bacteria and *E. coli* were reported as absent in each of the three samples for which results are provided.



Potability

Water samples were previously collected from the Beaver Creek RCMP Detachment water system on September 28, 2004 and June 15, 2005. The samples were submitted to Northwest Labs in Surrey, BC and ALS Environmental in Vancouver, BC for potability analyses. The results are summarized in Table M0131-2 in Appendix A6. EBA reviewed the analytical results to compare them with the Canadian Drinking Water Quality Guidelines (CDWQG) to observe general water quality, identify and recommend additional sampling and analytical, and to identify indicators of potential contamination as detailed below:

- The turbidity during the first sampling event was 1.7 NTU (the CDWQG MAC is 1.0 NTU). During the second sampling event, however, the turbidity was below the CDWQG MAC;
- The manganese concentration during the first sampling event was reported as 0.05 mg/L, which is equal to the CDWQG aesthetic objective of 0.05 mg/L, but was reported as 0.044 mg/L during the second sampling event, below the CDWQG aesthetic objective;
- The water quality results indicated that all other health based and aesthetic objectives were met for the parameters analyzed;
- Although not above the MAC, copper was elevated with respect to general groundwater quality for the Beaver Creek area;
- The water quality results indicated that the groundwater from which this system receives its water supply is a calcium bicarbonate type water; and,
- The hardness (as CaCO₃) was 241 mg/L during the first sampling event and 247 mg/L during the second sampling event, which is considered very hard.

6.3.2 Identification of Additional Analytical Testing Required

Additional analytical for the Beaver Creek RCMP Detachment that was identified to be included during the water system assessments is detailed below:

- As there had previously been an exceedence of the CDWQG MAC for turbidity, a sample was taken to re-test for turbidity;
- UV absorbance and UV transmissivity, as well as tannins and lignin, to determine potential for UV treatment as a disinfection option for this water system;
- Total organic carbon (TOC); and,
- Measurements in the field for total dissolved solids, conductivity, pH, and temperature.



Additional Analytical Results

A water sample was obtained during the water system assessment on July 27, 2005, and was submitted to ALS Environmental in Vancouver, BC for analysis. These results are summarized in Table M0131-2 in Appendix A6 and the laboratory reports are included in Appendix B.

- The water quality results from addition analytical sampling indicated that all health based and aesthetic objectives were met for the parameters analyzed.
- 6.3.3 Indicators of Potential Contamination

Chloride, nitrate and nitrite concentrations can indicate impacts from surfacewater sources or septic waste. Chloride concentrations were reported to be relatively low, however, may be elevated above normal background ranges for groundwater in the Beaver Creek area. Nitrate and nitrite concentrations, however, for this sample were low and within the normal background range for this area. These water quality results alone are inconclusive regarding whether the aquifer from which the groundwater is obtained for the Beaver Creek RCMP Detachment is under the influence of surfacewater sources or septic wastes.

6.4 Conceptual Hydrogeology

The log for this well indicates that the well is completed at a depth of 30.5 m within a gravel aquifer. The lithology indicates interbedded gravel, clay and silt overlying the aquifer, with permafrost encountered from 4.3 to 17.1 m. This is consistent with most well logs in the area, which indicate that discontinuous lenses of finer-grained sediments persist throughout the area, but in general the sediments are dominated by coarse alluvium. Discontinuous permafrost is also interpreted to persist throughout the Beaver Creek area. The variability of sediments overlying the aquifer indicates limited protection from surficial sources of contamination. A hydrogeological study previously completed in the Beaver Creek area by EBA determined that the direction of groundwater flow in the vicinity of the site is north to northeasterly.



6.5 Potential Contaminant Sources

Potential contaminant sources identified during the water system assessment are compiled in field notes in Appendix A6. Photos of potential contaminant sources are also provided in Appendix A6. There are no known potential sources of contamination within 30 m of the wellhead. Two monitoring wells, however, were noted to exist approximatly 25 m east of the well. The purpose of these monitoring wells should be determined, and the water quality results (if any) for groundwater sampling from these wells should be reviewed.

The following potential sources of contamination are located within 60 m of the wellhead:

- Two above ground fuel storage tanks (AST) at 34 m;
- An above ground fuel storage tank (AST) at 48 m; and,
- A pump island at 60 m.

Additionally the Alaska Highway is located 48 m away from the well. No indications of the location of a septic system were observed within the well vicinity at the time of site inspection and it is unlikely that a septic system exists within 30 m of the well. However, this should be confirmed.

6.5.1 Spills Records and Contaminated Sites Search Results

The Government of Yukon Environmental Programs Branch and Environment Canada Environmental Protection Branch did not identify any recorded spill events or contaminated sites issues for this site or neighbouring sites.

6.6 Identified Water System Deficiencies and Associated Risk

6.6.1 High and Medium Risk Deficiencies

- Poor wellhead completion (located in a pit below grade, pit is subject to flooding);
- There is no surface sanitary seal (grout or bentonite seal as required by the Canadian Groundwater Association's Well Construction Guidelines);
- By definition of the Draft Yukon GUDI Assessment Guideline, the well is potentially under the direct influence of surface water because it does not meet the requirements of the Guidelines for Water Well Construction;
- The exact location of the septic field and its proximity to the well is unknown;
- There are monitoring wells on the property and the purpose is unknown; this may indicate the presence of existing or former soil and/or groundwater contamination;



- The pressure tanks are constructed of galvanized steel and do not meet present plumbing code; and,
- There is no treatment or disinfection system.
- 6.6.2 Low Risk Deficiencies
 - Although the copper concentration was not in exceedence of the CDWQG MAC, copper was elevated with respect to general groundwater quality for the Beaver Creek area; and,
 - There has been a previous CDWQG MAC exceedence of turbidity, but the most recent sampling events reported turbidity less than the CDWQG MAC.

6.7 Mitigative Options for Deficiencies

Mitigative options were developed to address the deficiencies identified in the previous section. Deficiencies are categorized by recommended level of priority (with Priority 1 being most critical).

As mentined previously, it is important to detemine the location of the on-site sewage disposal system, and to investigate the purpose, and history of the groundwater monitoring wells observed on the site.

6.7.1 Priority 1

- The wellhead completion should be improved by raising the well casing to a minimum of 500 mm above ground level and retrofitting a proper surface-seal to 3 m below grade. Once the wellhead is upgraded, the well and water system should be shock chlorinated;
- Disinfection such as an NSF/ANSI 55 approved UV disinfection system should be installed. This is a conceptual design recommendation based on the information available for planning and budgeting purposes. Engineering input will be required for final system specifications; and
- The source of the water that was observed to be ponded at the bottom of the well pit should be identified, if it is resulting from a leak, the well should be repaired.

6.7.2 Priority 2

• Filtration to 1 micron absolute (NSF 61) should be installed in advanced of the disinfection system.



6.7.3 Priority 3

- Continue to monitor copper concentrations and turbidity; and
- Replace the galvanized pressure tanks with a bladder pressure tank that meets code.

6.8 Cost Estimates for Mitigative Options

Engineering costs for mitigative options are estimated to be 20% of construction costs, and would include inspection and completion reporting. The costs for materials and labour (not including engineering) are provided in the sections below. An additional contingency allowance of 20% is suggested for budgetary purposes.

6.8.1 Priority 1

- Standard wellhead improvements with a pitless unit installation and surface seal retrofit would cost approximately **\$5000**; and,
- The proposed UV disinfection system would cost in the order of **\$2,500** installed. Based on the observed hardness, a pretreatment softening system would likely be required (**\$2000**).

6.8.2 Priority 2

• The UV system previously described in Priority 1 would be installed with a 5micron pre-filter (NSF 61). A 1-micron (absolute) NSF 61 filtration system (NSF 61) to be installed between the 5-micron and the UV system would cost approximately **\$1000**.

6.8.3 Priority 3

- It is presumed that routine monitoring of copper concentrations and turbidity would be completed under operation and maintenance costs.
- The cost to remove and replace the galvanized pressure tanks with a bladder pressure tank would cost approximately **\$2,000** with materials and labour.









Z:\0201Drawings\1260002 Water Assessment YTG\003 -Western Region\beaver\1260002 B Crk RCMP Det_M0131B Schematic.dwg, 4/4/2006 12:44:55 PM, Adobe PDF, jbuyck

Western Region – R.C.M.P. Detachment Building # MO131

DISTRIBUTION & TREATMENT SYSTEM DATA

Item	Description	Manufacturer	Model	Part No.	Serial No.	Size
1	Sub. Rump					
2	PRIJEGURE TANK	1 MYERS	120 GALV	x2		120 GALLON
3	PRESSURE Switch	Square D	FSG-Z			2.40- 1/4"NPT
4	PRESSURE GAUGE	MARSH	2" (0-100P	si		2" - 1/4"NP5
5	JET PUMP	GRUNDFOS	JaA			1 Hp
6	HOLDING TANK	ZEEBEST	ZZOLOAN	F		220 Gmion
7						
8	· · · · · · · · · · · · · · · · · · ·					
9						
10						



Buildina #	Building Name	Number of Sampling Events	Time Period over which Sampling was Done	Any Positive Total Coliform Results? (yes or no)	Fraction of Positive Total Coliform Results vs. Total Sampling Events	Any positive E.Coli results? (yes or no)	Most Recent Sampling Event Available for EBA Review	Is Most Recent Result Positive?
M0131	Beaver Creek R.C.M.P Detachment	3	Sept-04 to Jun-05	no	0/3	no	16-Jun-05	no

TABLE MO131- 1: SUMMARY OF BACTERIOLOGICAL RESULTS



Table M0131-2: Water Quality Results

SOURCE:	Building M RCM	10131 - Bea IP Detachn	iver Creek nent			
Location/ Resident	В	eaver Cree	k			
Address						
Treatment		None				
Disinfection		None		GC	DWQ Criter	ria
Source of Water		On-site wel				-
Purpose of Sampling	Base Line	Base Line	Additional Analytical			
Sample Location			Kitchen tap			
Date Sampled	Sept-28-04	15-Jul-05	27-Jul-05	Lower	Upper	Limit
Physical Tests (ALS)				AO	MAC	AO
Colour (CU)	5	<5.0	-			15
Conductivity (uS/cm)		471	-			
Total Dissolved Solids	259	291	-			500
Hardness CaCO3	241	247	-	AO > 200 = p	oor, > 500 un	acceptable ^A
рН	8.14	8.21	-	6.5	1	8.5
Turbidity (NTU)	1.7	0.86	0.5200		1	5
UV Absorbance			0.0230			
% UV Transmittance			94.8			
Dissolved Anions (AFS)						
Alkalinity-Total CaCO3	217	222	-			
Chloride Cl	10.4	10.9				250
Fluoride F	0.05	0.055	-		1.5	
Silicate SiO4			-			
Sulphate SO4	24	24.6	-			500
Nitrate Nitrogen N	0.2	0.15	-		10	
Nitrite Nitrogen N	0.05	<0.10	-		3.2	
Ammonia Nitrogen N			-			
Total Phosphate PO4			-			
Total Metals (ALS)						
Aluminum T-Al	0.005	< 0.010	-			
Antimony T-Sb	0.0014	<0.00050	-		0.006	
Arsenic T-As	0.0014	0.00108			0.025	
Banum 1-Ba	0.049	0.046			<u> </u>	
Boron I-B	0.025	<0.10			0.005	
Calcium T.Co	0.00001	70.0	-		0.005	
Chromium T-Cr	0.0008	<0.0020			0.05	
Copper T-Cu	0.792	0.661	-		1	
iron T-Fe	0.13	0.079	-			0.3
Lead T-Pb	0.0015	0.0039	-		0.01	
Magnesium T-Mg		12.2	-			
Manganese T-Mn	0,05	0.0437	-			0.05
Mercury T-Hg		< 0.00020	-		0.001	
Potassium T-K		1.76	-			
Selenium T-Se		<0.0010	-		0.01	
Sodium T-Na	3.7	3.0				200
Uranium T-U	0.0005	0.00032			0.02	
Vanadium T-V	0.657	0.991				5
Zinc 1-Zn	0.657	0.881				
Organic Parameters						
Tannin and Lignin			0.10			
Total Organic Carbon C			1.42			
Field Chemistry (EBA)			Į			
рН			7.99	6.5		8.5
TDS (ppm)			174			500
EC (uS/cm)			291			
Temperature ("C)			10.9	l		
Free Available Chlorine	I	L		I	l	

Notes:

A. Guidelines indicated for hardness are not CDWQG, rather they are general aesthetic guidelines

- exceedences are indicated in yellow highlighting.

Italics and underline indicates exceedence of proposed MAC (ie. arsenic)

Bold with Yellow highlighting indicates exceedence of CDWQG Aesthetic Objective (AO)

Bold Underline with Yellow highlighting indicates exceedence of CDWQG MAC

Results are expressed as milligrams per litre except for pH and Colour (CU)

Conductivity (umhos/cm), Temperature (°C) and Turbidity (NTU)

< = Less than the detection limit indicated.

AO = Aesthetic Objective

MAC = Maximum Acceptable Concentration (Health Based)



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SMALL PUBLIC WATER SYSTEM ASSESSMENT

PARTA: EBA Site Inspection

Inspector: Ryan Martin, Luke Lebel

Date	July	27,	2005	
------	------	-----	------	--

WELL ID #	Owner	Location Description
Mol31	RCMP	Beaver Creek RCMP Detachment

1. Well Location and Potential Contaminant Sources

- a. General location of well: (Community, Subdivision, etc.) Bearer Cree K
- b. Specific location: (Road or street, Building number, name of owner and/, legal description,

c. G	PS location: N6916890 E506480 elv667m ± 19m	
d	Is there electric power? I Yes INO	
e	Is there outside water access?	
f.	Does the well system have:	
□ 1	to more service connections to a piped distribution system? If so how many RCMP Detachment	
	5 or more delivery sites on a trucked distribution system? If so how many	
g.	Nearest building, specify RCMP Detachment	
h.	Distance from well to building	
<u> </u>		
i.	If there is an effluent disposal field, is its location known? There is a vertice system b	t
j.	Distance from well to nearest point of known field: it's location is unknown	0.
k.	Well location relative to field: upslope downslope lateral	

1. Is there any part of a sewage disposal system(s)or other potential sources of pollution that may pose a

hea	alth and safety risk within 30 m? I Yes I No
m.	Is the well located within 300 m from a sewage lagoon or pit? \Box Yes \boxtimes No $\sqrt{h^{2}Ke^{4}}$
n.	Is the well located within 120 m from a solid waste site or dump, cemetery? \Box Yes \Box No $\cup_n like$
0.	Is the infrastructure protecting the wellhead, pumphouse, storage tank and/or water treatment plant designed and secured to prevent:
	Unauthorized access by humans? I Yes I No Entrance by animals? I Yes I No unlocked enclosure
p.	Is well site subject to flooding? X Yes INo
q.	Is the well site well drained? \Box Yes \bigstar No low point on property
r.	Is there a buried fuel tank on the property? \Box Yes \boxtimes No unlikely, but unknown
	If yes, is it in use abandoned
	Is the location known? Yes No Distance from the well to known buried tank
s.	Are there any other known contaminant sources on the property?
	Yes No Describe
	If yes, specify the source: dump sewage lagoon cemetery other
	Potential Source 1: $AST + 2$; Distance from well to Potential Source 1: $-37m$ Potential Source 2: $AST - 3$; Distance from well to Potential Source 2: $-48m$ Potential Source 3: $-960m$; Distance from well to Potential Source 3: $-360m$ Potential Source 4: $Alaska Highway$; Distance from well to Potential Source 4: $-38m$
t.	Are there other wells on this property? \boxtimes Yes \Box No
	How many? 1 in use abandoned require proper sealing

<u>2. v</u>	Vell and Wellhead information:
a.	When was well installed? Year 1979 Month October
b.	Type: 🛛 drilled 🗍 dug 🗍 sand point 🗍 other
c.	Is there a drillers log for the well: 🛛 Yes 🗌 No
d.	Is there a surface seal to 6 m 🗌 Yes 🖾 No 🗌 unknown 🗍 unlikely
e.	Surface casing: Yes Diameter No
f.	Well casing: Diameter 15 cm Material: Steel plastic Concrete
g.	Depth of well: $\frac{100 f^{4}}{100 f^{4}}$ \Box measured (if possible) \Box reported Δ from log
h.	Static water level below ground: Unknown
	\Box measured (if possible) \Box reported \Box from log \Box flowing
i.	(If granular) Is the well completed: \Box open end casing $igties with a well screen$
	with slotted pipe unknown other
j.	(If bedrock) Does the well have a liner? $\Box_{yes} \Box$ No $\Box_{steel} \Box$ plastic
k.	If there is a well screen: length $\frac{4 \text{ f}}{96 \text{ f}}$ slot size(s) $\frac{30 \text{ s}}{100 \text{ f}}$ reported
1.	Is there a sump below the screen? \Box Yes \boxtimes No
m.	Is the well head: \Box in pumphouse $\!$
	in a wooden enclosure other, describe
n	If the well head is located in a wooden enclosure

	i. Is the well head below grade? describe in detail ~ 2,1 m below grade						
	ii. Are there signs of ponding on the enclosure (e.g. water stains, etc.)? If Yes \Box No flooding at bottom of pit (~5 cm)						
	iii. Is the wellhead enclosed by fiberglass insulations? Yes X No						
	iv. Any evidence of rodents? Specify No						
	v. Does the well casing have a proper seal cap? \boxtimes Yes \square No If no, describe condition hut could not be seen due to insulation						
2 1	Votor Sumphing This Woll.						
<u></u>	Predefinition is the water from a surface water source or under the direct influence of surface water?						
a.	By definition is the water from a surface water source of under the direct initiatice of surface water?						
	\bowtie Yes \square No \square farther investigation required.						
	If yes is there treatment or disinfection \Box Yes \bowtie No						
	Explain (filtration, disinfection etc)						
<u>4. /</u>	Aquifer Supplying This Well:						
a.	The aquifer is: 🗆 bedrock 🕅 granular sediment 🗆 unknown						
b.	Does water level and/or well capacity show seasonal fluctuation? \Box Yes $\bigotimes_{v_n} No$						
<u>5.</u>	Pump Installation:						
a.	Is the well equipped with a pump? \square yes \square No						
b.	Type of pump: hand Belectric submersible D jet						
	□ shallow well centrifugal □ other,						
c.	Description: Manufacturer Model						
	horsepower capacity voltage						

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d.	Date installed: By:
e.	For submersible pump, depth of setting below surface
f.	Drop pipe for submersible pump: \Box steel \Box plastic unknown
g.	Pump delivers water to: Pressure tank clevated tank clevated tank
h.	Are there automatic pump controls: \heartsuit Yes \Box No
i.	Is there provision for taking water samples before water reaches storage? \Box Yes $\overleftarrow{\Sigma}$ No
j.	Is there a water meter on the system? \Box Yes \boxtimes No
k.	Is the pump and piping protected from freezing? 🛛 Yes 🗌 No
	If yes, describe: Insulation and heat trace
1.	Comments on pump installation:
<u>6.</u> a.	Conclusions Comments on overall installation:
b.I	Recommendations:
—	
b.I	Recommendations:

PA Ins	RIB: EBA Site Inspecti spector: BELT ALRS	on SSEQ	Date July 27/05
	WELL ID #	Owner	Location Description
	M0131	YTG.	RCMP DETACHMENT
6.	Water Treatment		BEAVER CREEK
8.	Is well water treated?	Yes 🗹 No; Type of	treatment:
	□ chlorination □ iro	on and or manganese remo	val 🗌 other
b.	Is water entering plumbin as effective as chlorine	g or piped distribution sys used to achieve disinfecti	tem treated with chlorine or another treatment that is on throughout the system?
	I Yes I No	If so how	
c.	If treated with chlorine, is	the free residual chlorine	concentration less than 0.2 mg/L
	□ Yes □ No _	reading	
	Tested at		_(location)
d.	Is testing for chlorine resid	ual concentration done at	the tap (eg. Kitchen faucet) or from representative
	points in a piper distribution	on system, menuding a por	in nom tap at the end the
	I Yes I No	If yes how ofte	n?
e.	If the drinking water is be	ing transported by water of	lelivery truck does it have a minimum chlorine free
	residual of 0.4 mg/L at	the time of fill. \Box Yes	I No
7.	Water Quality (observa	tions):	
a.	Does the water stain plum	abing? 🗆 yes 🗆 No 🗹 s	light 🗆 severe
	Type of stain:	brown 🗹 red] black
b.	Does the water contain se	diment? 🗆 Yes 🕬	o 🗆 occasional 🔲 constant
c.	Is there an unpleasant odd	our? 🗆 Yes 🗆 N	to H ₂ S Other

d.	Is there an unpleasant taste? Yes Yoo brackish Other								
e.	Is there a history of bad bacterial analyses? ?								
f.	Is there a chemical analysis? ?								
g.	Is there analysis of trihalomethanes (THMs) where the water source is a surface water supply or a well under the direct influence of surface water? \Box Yes \Box No								
h.	Is the drinking water tested daily with an accurate reading chlorine test kit capable of reading in the								
range 0 to 3.5 mg/L of free chlorine residual in increments of 0.1mg/L? 🗌 Yes 🗹 No 🔲 unknown									
i.	If yes is the test performed in accordance with manufactures directions? \Box Yes \Box No \Box unknown								
j.	Is a record of the date, time, name of person performing the test and results of the drinking water sample								
	kept? I Yes I No								
	TANK AND PIPING DETAILS								
	Tank Room Is there a water tank? (Yes No Details: PRESENCE TANKS (Z) Where is it located?								
	Comments: WATER ROOM - NETTIC OF LETACHMENT								
	Is the room in which the water tank is located heated to maintain an optimum temperature of 4°C for stored water? YES NO Comments: TEMPORARY HEATER IN PLACE								
Are there windows in the add-on that may allow direct sunlight onto the water holding tank? YES									
	NO								
	Comments:								
	Are there other heat sources near the tank? YES NO Comments:								
	Is there waterproof flooring with a sealed base to contain spills? YES NO Comments:								

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Overall Tank

What are the tank size and dimensions?

What material is the tank constructed of?

Is tank and associated piping constructed of safe materials (i.e. CSA approved and material that does not affect the taste of the water)? YES NO

Comments:

Tank Inlet, Outlet and Lid

Is there adequate access on the tank for cleaning (i.e. min 15" access lid)? YES NO

Does the lid have a tight seal and is it watertight when closed? YES NO

Does the tank have an overflow or high level whistle? YES NO

Is the water tank drain accessible? YES NO

WATER TANK AND WATER QUALITY CONDITION

Are there signs of staining or biofouling? YES NO Comments:

Is there any sediment or scum in bottom of tank? YES NO Comments:

Is there any odour associated with the water or tank? YES NO

Have there been any bacteriological analyses conducted previously? YES NO

Does the tank appear that it has been cleaned recently? YES NO

Are the tanks easily assessed for the purpose of cleaning and disinfection? YES NO

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- 8. Conclusions
- a. Comments on overall installation:

THIS INSTALATION DOUR NOT MEET CODE. b. Recommendations: REPIPE PRESSURE TANKS. REPLACE WITH PROPER BLOODER TANKS. INSTAN PERMANENT HEAT SOURCE Coom. iu UV INSTALL TERATMENT IF REDUIRED FOR IREATMENT. INSTALL APPROPRIATE UU (HSF55 CERTIFIED) FOR TROW STERILIZEN INSTITUTE BI- ANNUM KEOUIREMENT. PROGRAM. War ` MAINTENANCE

FIELD REPORT

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Klondike Enterprises				es	Water Well R.C.M.P. Beave				
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101	561	Eroz	en cl	27					
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791	91*	silt	clay	wood c	hipa				
11	100*	grav	el so	me silt					
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ize	Туре	Size	Туре		Bottom of screen	100*			
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eet	Inch	Feet	Inch	2' riser lead packer					
96	0			5 7/8" bit pin					
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				STATIC	LEVEL	Total Ric	Time ·	18	hrs.
				Ground	level	Total Sta	indby		hrs.
	1			Top of	casing	Drilling	Mud		sacks
				·	STENATURES				







