

LAYNE MEN YORK CO., INC. ROCHESTER, NEW YORK

LAYNE-NEW YORK CO., INC. 1250 WEST ELIZABETH AVE. LINDEN. N. J. DRILLERS REPORT Contract ELMERA BOARD OF EDUCATEON WELL NO. ! City ElmIRA.... County CHEMUNG..... State. NEW YORK Formation Sketch of Setting Remarks MATERIAL SET Pipe Length Metal — T. and C. or Welded Size STL 18" GRAVEL Armco Screen Everdur Stainless S. 10: " CLAY Diameter Top-Diameter Bottom-Length CLAY Cone GRAJEL Plug STL Streaus Size. N.O.5 ... 10 Clay Used { Bags Powdered Reg. Bags Laynite B-3 BROWN CLAY Date Work Started. 9-29-79. Date Pumped 1-11-1 GRAVEL On sketch show 16 Std. Rotated (1)Parts Reverse Rotated Cable Tool or Bailed LARGE Depth of pump pit (2)MEDIUM (3)Kind of seals SMALL GRAVEL (4) Distance from surface to each section of well (5)Depth of well after plugging SAND Did Well clear up? How soon? SHR 31 الالامس SANDY 32 CLAY PRELIMINARY TEST DATA Static Level. 11. 02 Date. 1-11-78 qray Capacity......... GPM with Pumping Level of 1996 CLAY Fill in and sign other side of this report also. Morman Kabler

1				LOG O				
w v	eli No	1 I for (Owner)	Elmi	Job No. 77605 Ta School Distric		est No	······	
· .	g or wer	Address	outh N	lain Street Southp	ort, N.	Υ.		
				in		County,	State of	
Fu To	tal depth	etch of locatio	n Well	Date Drilling star 76' Diameter Test Hol	ed <u>Sept</u> .	<u>∠7</u> Date T Elevation at G	est Hole round Lev	Completed
Al	l Measur	ements taken	from	ilable Distance from 10 for from 10 for from 10 for from 10 for 1				
	CKNESS TRATUM	· DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOU EACH STRATU
	51	51		gravel fill and	clay			
	51	101		Clay gravel lump	s and st	reaks		
	61	161		brown clay and g	ravel			
	151	31 '		large medium to	small gr	avel and	sand	
*	11	321		yellow sandy cla	У			
-	<u>1</u> 4,	76'		gray clay				
		· · ·						
		<u>_</u>		filled hole back	to 311			
••••••••••••••••••••••••••••••••••••••		· · · · · · · · · · · · · · · · · · ·		<u>111160 HOLE Dati</u>				
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					- -103 /31 pe		1 10 19 - X- 3 - -	
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						AEIAEU SA	INNIVAU	dunz.
Rei	narks an	d opinion of T	est		•		519 .2	HARMERA, 3 ALL

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FOR: _____Elmira School Board _____ DATES: January 11, 12 1978

LOCATION: South Elmira Facility _____ PUMPING WELL: _____

WE	LL NO						10	····			
TIME	AIR PRESS.	PUMPING LEVEL	OBS.	OBS.	OBS.	OBS.	OBS. WELL		TEMP.	ORIFICE	GPM
STATIC AM	LEVEL	11.02								16.5	50 0
01		13.20								11	11
2		13.32									† †
3		13.43								11	11
4		13.49								71	11
5		13.38								11	11
6		13.35								11	11
7		13.30								*1	11
8		13.36								11	11
9		13.35								· #1	11
10		13.37								*1	11
15		13.45								11	n
20	<u> </u>	13.40								17	
25		13.52									
30		13.57									11
40	~	13.62								11	11
50		13.67								11	11
AM		13.71								11	11
15		13.78									11
30		13.81								11	11
		13.85									<u>n</u>
AM Dofi 1:00		13.99								11	11
:00		14.00	ļ				1			†1	п
2:00		14.10								11	TI
<u>:00</u>		14.14					<u> </u>				11
:00		14.22				_ _			+	11	<u>†1</u>
5 <u>:00</u>		14.28		<u> </u>	1					11	11

ORIFICE 5 IN. ON 6 IN. PIPE AIR LINE FT. OBS. DIST. FROM ELEV. OBS. DIST. FUMP. WELL PUMP.	
	ROM ELEV.
PUMP TYPE	
SETTINGFT. TO SUCTION FLANGE	<u> </u>
SUCTION FT. OF IN PIPE/HOSE	

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FOR: Elmira School Board DATES: January 11, 12 1978

LOCATION: South Elmira Facility _____ PUMPING WELL:

 $1 = 10^{-10}$

1 WELL NO. JOB NO.... PUMPING OBS. OBS. AIR OBS. OBS. OBS. 085. ORIFICE TIME темр. GPM PRESS LEYEL WELL WELL. WELL. WELL WELL WELL. INCHES STATIC LEVEL 0 ____ 0 14.36 6:00 16.5 500 14.37 11 11 7:00 14.38 17 8:00 11 14.38 11 .. 9:00 14.39 11 10:00 ... 11:00 14.46 11 ... Mid-Nite 12:00 14.48 11 11.... AM ___1 14.50 11 н 2 14.52 11 ... 3 14.54 11 ... 14.56 11 4 11 5 14.58 11 11 ... 11 6 14.60 14.62 11 11 7 11 8 11 14.60 14.59 11 11 9 10 14.58 11 H. 14.56 Noon 11 \mathbf{n} 14.58 12 11 11 14.59 п 11 1 2 14.63 ... 11 14.60 3 ** tr. ... 4 14.60 11 5 14.62 11 11 6 14.65 11 11 14.65 7 n 11

QUALITY: TIME	E MN I	IARD	PH		DOR	TASTE_	
ORIFICE	IN. PIPE AIR LINE	OBS. WELL	DIST. FROM PUMP. WELL	ELEY.	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.
PUMP TYPK,	STAGES						·
SETTING	FT. TO SUCTION FLANGE		+				
SUCTION FT. C	DF IN PIPE/HOSE						
		1	1	J.,	U	1 1	

PUMPING	TEST	RECORD
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Elmin	a School Board	DATES:	January 11,	12	1978

FOR: __

LOCATION:

South Elmira Facility

_ PUMPING WELL: ____

1 JOB NO .. WELL NO. PUMPING OBS. OBS. 086. OBS. OBS. OBS. ORIFICE AIR TEMP. GPM TIME PRESS. LEVEL WELL. WELL. WELL, WELL_ WELL WELL INCHES _ ٥ 0 LEVEL STATIC 8 14,66 16.5 500 9 14.66 11 11 10:00 14.65 n 11 14.66 11 11:00 Mid-Nite 12:00 14.65 11 11 14.65 11 Ŧ1 AM 1:00 2:00 14.65 11 11 3:00 14.65 .. 11 4:00 14.65 11 11 5:00 14.66 11 11 6:00 14.65 11 ** 7:00 14.65 ** ** 14,65 11 11 8:00 11 ŧt 9:00 14.65 SHUTDOWN RECOVERY AM 9:01 12.32 ... 11 12.23 11 9:02 11 9:03 12.18 Ħ n -9:04 12.12 11 n 12.09 11 9:05 11 9:06 12.07 11 11 9:07 12.03 11 11 9:08 12.00 ŤŦ. 11 9:09 11.98 ... 11 9:10 11.95 Ħ 11 9:15 11.85 11 11

QUALITY: TIME FE MN	HARD	PH		ODOR	TASTE .	
ORIFICEIN. ONIN. PIPE AIR LINEFT.	OBŞ. WELL	DIST. FROM	ELEV.	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.
PUMP TYPE, SIZE \$TAGES					1	
SETTINGFT. TO SUCTION FLANGE		+	<u> </u>	 	<u> </u>	
SUCTION IN PIPE/HOSE						



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FOR: _____

Elmira School Board DATES January 11, 12 1978

LOCATION: South Elmira Facility PUMPING WELL:

WE	LL NO		JOB NO								
TIME	AIR PRESS.	PUMPING LEVEL	OBS. WELL	OBS. WELL	OBS.	OBS. WELL	OBS. WELL	OBS.	TEMP.	ORIFICE	GPM
STATIC	LEVEL								-	0	0
9:20		11.78								16.5	500
9:25		11.76		-			<u> </u>			11	11
9:30		11.69								11	11
9:40		11.65	 							11	T1
9:50		11.59								11	t1
60		11.48	 				<u> </u>		 	11	11
70		11.39		<u>-</u>						"	11
80		11.32								11	- 11
90		11.26								11	11
1:00		11.16								- 11	**
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		<u> </u>									
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QUALITY: TIME FE MN	HARD	PH		DDOR	TASTE_	
ORIFICEIN. ONIN. PIPE AIR LINEFT.	OBS. WELL	DIST. FROM	ELEV.	OBS. WELL	DIST. FROM	ELEV.
PUMP TYPE, SIZE STAGES						
SETTINGFT, TO SUCTION FLANGE						
SUCTION FT. OF IN PIPE/HOSE				.	1	

PUMPING TEST RECORD



FOR: Elmira School Board DATES: January 5, 1978

LOCATION: ______ South Elmira Facility ______ PUMPING WELL: ______

1 Step Test

WE	WELL NO. <u>1 Step Test</u> JOB NO.										
TIME	AIR PRESS.	PUMPING LEVEL	OBS. WELL	OBS. WELL	OBS. WELL	085. WELL	OBS.		TEMP.	ORIFICE INCHES	
STATIC 1:30	LEVEL	11.34								° 9.5''	-20
31		11.73	ļ							11	1
32		11.77								11	1
33		11.80								11	1
34		11.81		_	-		ļ .		_	n	'
35		11.81								11	,
36		11.81							<u> </u>	71	1
37		11.82								TI	,
38		11.83	<u> </u>							u	1
39		11.83								11	,
1:40		11.83									1
45		11.83								11	1
50		11.84								11	1
55		11.85								- 11	•
2:00		11.85								11	1
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QUAL	ITY: TIM	£	FS		MN	HARD.	PI	۱ <u></u>	DOR	TASTE	

QUALITY: TIMEFE		ARD	PH	(DOR	TASTE_	
ORIFICE4IN. ON_6IN	. PIPE AIR LINEFT.	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.
PUMP TYPE, SIZE,	STAGES						
SETTING	FT. TO SUCTION FLANGE		+				
SUCTION FT. OF							
						1	
						1	

PUMPING TEST RECORD



FOR: Elmira School Board DATES: January 5, 1978

LOCATION: _____ South Elmira Facility _____ PUMPING WELL: _____

WELL NO.___ 1 Step Test JOB NO._ PUMPING OBS. 088. obs. OBS. ORIFICE 085. OBS. AIR TIME TEMP. GPM PRESS. WELL_ LEVEL WELL ... WELL WELL WELL WELL INCHES STATIC LEVEL 0 _ ۰ 11.30 16.5 500 PM _2:30 31 ___ 32 12.84 11 11 . 12.88 11 33 12,91 ** 11 34 ... ** 35 12.94 36 12.94 11 11 11 11 12.97 37 12,99 11 38 11 Ū. 39 13.01 11 2:40 13.02 11 11 13.08 11 11 45 ** 11 50 13.12 11 TF. 55 13.14 3:00 13.17 11

QUALITY: TIMEFEMNL	HARD	PH		DDOR	TASTE_	
ORIFICE 5 IN. ON 6 IN. PIPE AIR LINE	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.	OBS. WELL	DIST. FROM	ELEV.
PUMP TYPE				·	†	
SETTINGFT. TO SUCTION FLANGE			+			
SUCTION			ļ			
				1		

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PUMPING TEST RECORD



FOR: Elmira School Board pATESanuary 5, 1978

à.

LOCATION: _____ South Elmira Facility _____ PUMPING WELL: _____

WE	LL NO	1	<u>Step Test</u>			JOB N	0	······································	- • • - •	· · · · · · · · · · · · · · · · · · ·	
TIME	AIR PRESS.	PUMPING LEVEL	OBS.	OBS. WELL	OBS.	OBS. WELL		OBS. WELL	TEMP.	ORIFICE	GPM
STATIC	LEVEL									0	0
[<u>_3:30</u>		11.33	·		<u>.</u>		_			37.5	7.50
31			1		- 		-				
32		14.46	 								11
33		14.62	ļ			_					11
34		14.73		<u>.</u>						11	11
35		14,80								t1	"
36		14.86								†1	11
37		14.93								11	91
38		14,97							_	ft	11
		14.99								11	- 11
3:40		15.01								11	11
45		15.13								11	11
50		15.20								FT	f 1
55		15.26								11	11
4:00		15.34								11	11
	<u> </u>	10.01						1			
				-		<u> </u>			+ ·		
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		<u> </u>			-		1	1			
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QUALITY: TIME FE MNH	ARD	PH	c	DOR	TASTE	
ORIFICE 5 IN. ON 6 IN. PIPE AIR LINE	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.	OBS. WELL	DIST. FROM PUMP. WELL	ELEV.
PUMP TYPE, SIZE STAGES					†	
SETTING		·				
SUCTION FT, OF IN PIPE/HOSE						

1/21/70	1	1	2	1	1	7	8
---------	---	---	---	---	---	---	---



Water and Wastewater Testing Specialists

LABORATORY REPORT

326 John Street Rochester, NY 14623 (716) 424-1970

Client Layne New York Company Mr. Fred Sieverts 3100 Monroe Avenue Rochester, New York 14618 Job No. 9176

Page_

Sample(s) Reference

Elmira School

Date samples (Xreceived () collected by General Testing 2/19/78

P.O. #	•		AL RESULTS tated otherwise)	
Sample Description All Wells 500 gpm	Well #1 30 min.	Well #1 15 min.	Well #1 1 min.	
Date(s) Collected 1/16/78 (Time(s)	Augenteen Gest			
Sand Analysis	< 1	41	10	
Date Collected 1/3/78	Well #2	Well #2	Well #2	
Sand Analysis	1	<1	<1	
	anni de Stat		9623362338	
			evere create	
	Albert and generation New Your Schemer Ma	na oka kana ka nana tana RE	CELVED A	
	des sansa			

Analytical procedures in accordance with Standard Methods for the Examination of Water and Wastewater, 14th Edition and Methods for Chemical Analysis of Water and Wastes, EPA. (<) indicates lowest detectable concentration with procedure used

Pictard AM

Richard J. Scheible Laboratory Director



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Orlando Laboratories, Inc.

P. O. Box 8008 •

Orlando, Florida 32806

• 305/843-1661

Report to: Layne New York Company Inc.	_ Appearance: <u>Clear</u>
Date:31 Oct. 77	- Sampled by: <u>Client</u>
	Taken after 8 hrs. pumping
Report Number:	- Identification: Elmira School District,
	Southport, N.Y.

METHODS

STANDARD WATER ANALYSIS REPORT

This water was analyzed according to "Standard Methods for the Examination of Water and Wastewater," Latest Edition, APHA, AWWA and WPCF.

	Data Signific ance		RESULTS	Data Significance	^
Determination		mg/l	Determination		mg/l
Total Dissolved Solids	X	340	Total Hardness, as CaCO ₃	х.	204
Phenolphthalein Alkalinity, as CaCO3	x	0	Calcium Hardness, as CaCO3	×.	156
Total Alkalinity, as CaCO3	х		Magnesium Hardness, as CaCO3	×.	<u> </u>
Carbonate Alkalinity, as CaCO3	x	0	Calcium, as Ca	Xi	62
Bicarbonate Alkalinity, as CaCO3	×		Magnesium, as Mg	•X	12
Carbonates, as CO ₃	×	0	Sodium, as Na	×.	
Bicarbonates, as HCO ₃	×	176	Iron, as Fe	.x	0.02
Hydroxides, as OH	x	0	Manganese, as Mn	· .x	<0.05
Carbon Dioxide, as CO ₂	x	47	Copper, as Cu		<0./
Chloride, as C I	×	54	Silica, as SiO ₂	×.	8.9
Sulfate, as SO ₄	· X	40	Color, PCU	X	_2_
Fluoride, as F	.x -	0.1	Odor Threshold	×.	
Phosphate, as PO ₄	.x _	1.12	Turbidity, NTU	x	0.39
pH (Laboratory)	.ж. —	6.8	м		
pHs .	.x -	7.6		•	<u></u>
Stability Index	.к <u>–</u>	8.4			
Saturation Index	.× _	-0.8	· · ·	-	

Signed:

Chemist

RECEIVED

FEB 1 3 1978 STREETER ASSOCIATES, INC.

. . .



Ground Water and Environmental Professionals-Since 1891

March 7, 2000

Mr. Mike Dunn ELMIRA SCHOOLS MAINTENANCE 733 Benjamin St. Elmira, NY 14901

REFERENCE: Southside School Water Well Flow Test Results

Dear Mike,

I have enclosed the results of the flow tests we conducted on the 2 wells used for cooling at the Southside School. The wells and pumps are operating properly and require no further service at this time.

I thank you for providing Moodys with this opportunity to be of service to Elmira Schools. I am looking forward to working with you on future projects.

Most Sincerely, MOODY AND ASSOCIATES, INC.

Kenneth L. Cramer

Project Manager

MOODY AND ASSOCIATES, INC.

Pump Installation Report

Client: ELMI	RA BOAR	D OF E	DUCAT	ΓΙΟΝ				Well No.:	1			
Location: Sou	thside Sch	ool, Elmi	ra, NY	r				Contract No.: 99-535-KC				
Contact: Mike	e Dunn								Date: 2-29-00			
	n an	a A an	al out makes]	YPE OF V	VORK	47 - 19 (19 (19 (19 (19 (19 (19 (19 (19 (19		通知的行			
		V	Vell Flo	w Test								
					WELI	in yerişterkir.	OMANA <u>1762</u> 4 Presidente	1972) 1978-1977 - 1978 1978-1977 - 1978				
Type: Gravel				Size	e: 24" X 18		Depth:	31'		S.W.L.: 11.34'		
Casing Size(s)	: 18" to 21	', 24" to	21'				ength(s):					
Screen Type:	Wirewrap	ped Stai	nless S	iteel	Sc	reen Si	ze: 0.105"		Scree	n Length: 10'		
Screen From:	21-31'			Blank From	n: none			Sump Fro	m: no	ne		
Enclosure:Bal	ker Pitless	Adapter	,			Acce	ss: good					
Misc.:												
					PUMP			Yugir (1945				
Setting:	<u> </u>	<u> </u>					·		· · · · ·			
Make: Layne			· · · · · · · · · · · · · · · · · · ·	Model No.:			Serial No	0.:		Mfg. Date: 1978		
Type: Submer	sible		Size	:	Stages:		Impell	ers: enclose	d			
Size of Colum				of Column: T&	,,,,,,,,,, <u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,			of Column		<u> </u>		
Size of Shaftin			-71	Size of Top Special: none				Size of Oil Tube: none				
Discharge He		Pitless			Blow Off:4" thread outlet, boiler room				Length of Airline:			
			1 1800	rpm pump is i								
Pump Operat	-	_		ctions Given T		nn		T	itle: S	upervisor		
Misc.: there is					0, milite 20							
Wilse.: Lifet e h		o on the w	CII WAU		мото	D						
No. 1	a and a state of the			Type: Subm	al nerver the second	B Carlos	Size: 8	77		Frame:		
Make: GE				Serial No.:	lersible		5126. 0	Mfg. Date	.1079	Ріашт.		
Model No.:							Hz: 60		.1970	Amps:		
H.P.: R.P.M.: 1780		Volts: 4	00	Upper Brg.	ise: 3		[HZ: 00	Lower Br	 ''0'. '	Amps.		
Motor Resista		sul.:		Opper Dig.	•		Wdgs.:		5''			
	ince: In	sui.;					Wugs					
Misc.:												
an para se series a	no ago de contra de la contra de T				TEST	A STATE OF STREET, STRE				No		
Date	Time		W.L.	G.P.M.	Drawdo	wn	P.S.L 71	· Amps 21/21/2		Remarks Closed valve		
2-19-00	<u> </u>		1.34	0 300	.91		57	29/29/2		SC= 327		
			2.59	403	1.25		53	30/30/3		322		
			3.02	506	1.68		39	31/31/3		301		
			13.30	570	1.96		27	31/31/3	31	291 Open valve		
			•									
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										· · · · · · · · · · · · · · · · · · ·		
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				MI	SC. INFOR	MATI	DN			in all an		
					<u> </u>	<u>*******</u> **						

Work Performed By: ___Merle 'Butch' Weir, Ken Mook_

MOODY AND ASSOCIATES, INC.

Pump Installation Report

Client: ELM	RA BOARD	OF EDUCAT	TION	<u>P</u>			Well No.: 2			
Location: Sou	thside School,	, Elmira, NY						Contract No.: 99-535-KC		
Contact: Mik	e Dunn		Title: Water & Sewer Supt.				Date: 2-29-00			
	San Station in the			TYPE OF W	<u>ORK</u>	7745 (C.4.84	all and a state of the second			
		Well Flo	w Test			1		a and a same		
			en de la filipitation de la filipit La filipitation de la filipitation d La filipitation de la filipitation d	<u>well</u>		7 - 1 <u>977</u> - 1975 1977 - 1975	lagi in the second s	in a second and second second		
Type: Gravel			Siz	e: 24" X 18"		epth:	33'	S.W.L.: 12.87'		
): 18" to 23', 2			i	sing Length					
	Wirewrapped	l Stainless S			reen Size: 0.	.105"		reen Length: 10'		
Screen From:	23-33'		Blank Fron	1: none			Sump From:	none		
Enclosure:Ba	ker Pitless Ad	lapter			Access: go	od				
Misc.:					•					
		e na Zerovný konsta T		PUMP			egente i di persona N			
Setting:	<u></u>									
Make: Gould	s		Model No.: 8	RJLC	Ser	ial N	0.: 419334	Mfg. Date: 1999		
Type: Subme	rsible	Size	8"	Stages:2		npell	ers: enclosed			
Size of Colun		Туре	of Column: Te	&C-		engtl	of Column:	21'		
Size of Shafti				Special: nor	1e		Size of Oil T	ube: none		
	ad: Baker Pit	less	-	" thread out		oom	Length of Ai	rline:		
	ump: New pu		I				.	· · · · · · · · · · · · · · · · · · ·		
Pump Opera			tions Given T	o: Mike Du	nn		Title	: Supervisor		
	added to pun									
				MOTO						
Make: Frank	lin		Type: Subr			ize: 6	***	Frame:		
Model No.:			Serial No.:		1~		Mfg. Date:19			
	X	olts: 460	_1	ase: 3	F	Iz: 60		Amps: 37		
H.P.: 25 R.P.M.:3450	V	0115: 400	Upper Brg.				Lower Brg.:			
Motor Resist	ance: Insul	•	opper sig		Wdg	·S.:		<u> </u>		
	ance. msur	••								
Misc.:	in an			TEST		<u>.</u>	The second s			
		T STAT	C D M	Drawdow		i T	Amps	Remarks		
Date	Time	W.L. 12.87	G.P.M. 0	0	<u>en P.S</u> 10		26/27/28	Closed Valve		
2-19-00		12.87	300	1.23	6		29/29/29	SC= 244		
		14.10	403	1.65	5		30/30/30	244		
		15.09	506	2.22	4		30/30/31	228		
		15.50	602	2,63	2	7	29/30/30	228		
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		an daga sang salah Ngang sang salah	M	SC. INFOR	MATION	-4.8-03 X X	a an	cariti		
			Dura Marani	(7) (-1.5 337	ala Kan M.	- II				

Work Performed By: ___Merle 'Butch' Weir, Ken Mook

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Ground Water and Environmental Professionals-Since 1891

October 29, 1999

Mr. Mike Dunn Elmira Schools Maintenance 7333 Benjamin Street Elmira, NY 14901

Reference: Submersible Motor Cooling for Cooling Wells

Dear Mr. Dunn,

I have ordered the pump for your well and it will be delivered in the next few weeks. I will call ahead to let you know when the pump and motor have arrived so we can schedule on site work.

While setting up the work order for our crew, I reviewed the motor cooling requirements for the 6" submersible motor in your well.

The well has been reported to be either an 18" or 20" well. Based on the well being an 18" casing, the motor cooling is marginal at an estimated 0.60 feet/second flow past the motor. The manufacturer (Franklin Electric) recommends 0.50 feet/second flow. If the well is a 20" casing, then the velocity past the motor is not adequate to cool the motor, and premature failure could occur.

Therefor, I recommend that a flow sleeve (shroud) be installed when the pump is installed to increase the velocity past the motor and provide the required cooling for proper operation. The price for a flow sleeve is \$ 180.00 and it should only take our crew 1 additional hour to install it at the rate of \$ 130.00, for a total price of \$ 310.00. The shroud can be ordered and be delivered with the pump and would be installed at the same time.

Please review the manufacturer's data enclosed and advise if you want a shroud installed with the new pump.

Most Sincerely, MOODY AND ASSOCIATES, INC. Kenneth L. Cramer /Project Manager

22 Wincanton Drive, Fairport, New York 14450

\$ 310.9 OK

DifW. Hole Acting SUP. Building ronounds 11-4-99

716/421-0460 FAX 716/421-0874 NOV-- 1 1999 Maintenance



Ground Water and Environmental Professionale-Since 1891

October 29, 1999

Mr. Mike Dunn Elmira Schools Maintenance 733 Benjamin Street Elmira, NY 14901

Reference: Replacing Pump in One (1) Well & Flow Testing and Equipment Check of Second Well Moody Proposal No. 99-535-KC, Revised

Dear Mr. Dunn,

I appreciate you contacting Moody and Associates, Inc. (Moodys) to investigate and quote on replacing the pump and motor in 1 of the wells used for cooling at the High School.

Our field inspection showed that the motor is not functional and the condition of the pump is unknown since the motor could not be operated. We therefor recommend that the pump and motor be replaced. After installing the new pump, the well should be flow tested to measure the well's output. This output would be compared to the output when the well was installed to determine if any well cleaning should be performed.

A well generally needs to be cleaned and serviced after the first ten years of operation and then every 7-8 years thereafter. Since your well only operates seasonally, this time schedule could be extended. The wells were installed in 1979 and it has been 20 years since the wells have been serviced. Except for a few pump replacements, the wells have never been cleaned.

Price for our proposed services are as follows,

	Mobilization	-	850.00
2.	Pull pump, set new pump, conduct down hole video survey, and fl	ow te	est well
	Estimated at 12 hours @ \$ 130.00/hr=	\$	1,560.00
3	Flow Testing of second well, est. 6 hours @ \$ 130.00=	\$	780.00
3.	New Goulds pump, motor, ground wire, and misc. tape, etc.	\$3	3,400.00
Es	timated Project Total	\$	6,590.00

TERMS AND CONDITIONS

The undersigned Client hereby authorizes Moody and Associates, Inc (Moodys) to proceed with the services detailed in this proposal with the understanding that these Terms and Conditions are an integral part of the

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1995) 20**32 - 18**0 - 1800

proposal. This Proposal is an estimate and should not be considered as a 'not to exceed' value. This is a proposal for reasonably anticipated charges and the Client will be invoiced for all time, equipment provided, and materials utilized and consumed to complete the project. Items that are quoted as hump sum shall be performed and invoiced at the prices quoted.

Invoices will be submitted monthly for work completed with payment due 30 days from date of the invoice. A late charge at the rate of 2% per month, or highest rate permitted by law, whichever is lowest, shall be added to all amounts outstanding after 30 days. Client agrees to pay for all costs associated with collection of past due amounts.

Labor estimates for this project have been prepared utilizing Moodys regular pay scale. Should prevailing wage rates be applicable, the prices for the labor portions for the construction related services detailed in the proposal must be increased by 30%. If prevailing wager rates are applicable, please advise Moodys in writing and the project price(s) will be adjusted to reflect the increased labor costs.

Delivery of additional materials or equipment not originally quoted or incorporated into the project shall be invoiced at the rate of \$ 60.00/hour. If items ordered specifically for the project are returned, the vendors restocking charges shall also be invoiced.

Insurance shall be maintained in effect by Moody for General Liability, Automobile Liability, and Worker Compensation. A certificate of insurance can be provided to the Client upon request.

Client shall provide Moody with the following,

- a. suitable ingress and egress to the project location. Should the site be inaccessible by truck mounted equipment or water well service rig, and associated support equipment, the Client shall provide temporary roads, as needed.
- b. Location and protection of all utilities, underground or overhead, including but not limited to electric, gas, fiber optics, and telephone.
- c. All applicable permits as required by local, county, state or federal agencies to perform the work.
- d. A supply of potable water for clean up.
- e. Site restoration

Taxes are not included in the prices quoted. All applicable taxes will be added at the time of invoicing. If the work to be performed under this contract is to be tax exempt, tax exempt certificates must be provided.

CLIENT, ELMIRA ȘCHOOLS	MOODY AND ASSOCIATES, INC.
CLIENT, ELMIRA SCHOOLS BY: Dol W. Holo	BY:
TITLE: Acting Suparison Bol	KENNETH L. CRAMER PROJECT MANAGER
DATE: //- 4-99	DATE:

22 Wincanton Drive, Fairport, New York 14450

716/421-0460 FAX 716/421-0874

MATRIX Environmental Technolo	ogies Inc. WELL C	ONSTRUCTION DETAIL
PROJECT/LOCATION: CLIENT:	NYSDEC/Miller Po	
······································	NYSDEC Region 8 - Scott Rodal	
DATE COMPLETED:	12/11/97	SUPERVISED BY: Chris Treese
		REFERENCE POINT Elevation/Depth: <u>855.19</u> SURFACE SEAL Type/Depth: <u>Concrete/1.5'</u> DEPTH OF SURFACE CASING: <u>1.0'</u> RISER PIPE Size/Type: <u>2" diameter SCH 40 PVC</u> DIAMETER OF BOREHOLE: <u>8.25"</u> TYPE OF FILL: <u>Drill cuttings</u> TOP OF SEAL Elevation/Depth: <u>7.50'</u> TYPE OF SEAL: <u>Bentonite</u> TOP OF FILTER PACK Elevation/Depth: <u>8.50'</u> FILTER PACK MATERIAL: <u>#1 Sand</u>
		TOP OF SCREEN Elevation/Depth: <u>9.50'</u> SCREEN SIZE/TYPE: <u>.020 slot SCH 40 PVC</u>
		BOTTOM OF SCREEN Elevation/Depth: <u>18.60'</u> BOTTOM OF FILTER PACK Elevation/Depth: <u>19.10'</u>
		BOTTOM OF PLUGGED BLANK SECTION Elevation/Depth: <u>19.10</u>
		TYPE OF FILLER BELOW PLUGGED BLANK: <u>#1 Sand</u>
		BOTTOM OF BOREHOLE Elevation/Depth: <u>19.10</u>
IOTES		

Environmental Technologies

EA	втн	し で	ЕС	н	PROJECT:	BORING NUN	IBER	MW-15D	
4		American New Yori	Boulevard k 12110		Southside High School Elmira, New York	SHEET PROJECT #	1 OF 6837 FILE	4	
OREN			DR	GeoLogic, Scott Paul Sleas	GROUND ELI	EVATION	side of school bldg)/03
		CASING			<u>IPLER</u>		GROUNDWA	TER READINGS	
SIZE HAMMI FALL	ER	NA NA NA	TYPE HAMN FALL	1ER 14	it Spoon_OTHER: 40 lb4¼" I.D. Auge 30"	DATE <u>ers</u> 5/7/03 09:00	DEPTH 17.0' Top of Casing	CASING STAI	BILIZATION TIME
		SAMP	ILE				STRATA		· · · · · ·
	NO.	REC.	DEPTH	BLOWS	SAMPLE DESCF	RIPTION	CHANGE AND GENERAL DESCRIPTION	FIELD TESTING OVM (ppm)	EQUIPMENT C
0'	1	1.5'	0-2'	4-7-9-10	LOAM, damp.		0-0.7'	0	INSTALLED
	2	0	2'-4'	11-24-8-9	Brown fine(+)-med SAND, some damp. No Recovery.	e fine-crs Gravel,	0.7'-1.5'		
5'	3	1.5'	4'-6'	9-6-6-6	Brown fine SAND, and (-) fine-c concrete – evidence of fill mater		4'-5.5'	0	
	4	0.4'	6'-8'	8-12-9-9	Brown silty-fine SAND, and (-) fi brick, concrete – evidence of fill		6'-6.4'	0	
	5	1.1'	8'-10'	14-17-19-19	Brown-black fine(+)-med SAND Gravel (red brick particles obser	, some(-) fine-crs rved), dry-damp.	8'-9.1'	1.3	= = = =
10'					(FILL)				=
	6	0.9'	10'-12'	8-4-4-5	Red, tan, black fine-crs(+) GRA black fine-crs Sand, dry-damp.	VEL, and (+) brown-	10'-10.9'	64	= = = =
	7	0.5'	12'-14'	14-16-23- 100/0.4'	Red brick. Fine-crs GRAVEL and fine-crs g some(+) fine-crs gravel, dry-dan		12'-12.2' 12.2'-12.5'	1.0	= = =
15'	8	0.3'	14'-16'	100/0.3	Black-brown silty-fine SAND, so moist.	ome(+) fine-crs Gravel,	14'-14.3'	0	2 2 2 2
	9	1.1'	16`-18'	16-23-27-20	Black-gray fine-crs GRAVEL, litt Sand, wet.	tle brown silty-fine	16'-17.1'	0	= = =
20'	10	0.5'	18'-20'	20-24-17-20	Fine-crs gravel, little brown silty- (GLACIAL OUT)		18'-18.5'	0	= = =
	ORTIONS U	SED		PENETRATION		WELL CONSTRUCT	ON LEGEND	<u></u>	
TRACE LITTLE SOME	0 T 10 T 20 T	O 10% <u>C</u> O 20% 0- O 35% 5-	OHESIONLES 4 VERV 9	WT FALLING 30" S DENSITY (LOOSE LOOSE	ON 2" O.D. SAMPLER BEN COHESIVE CONSISTENCY 0-2 VERY SOFT 3-4 SOFT		CONCRETE	GRO	TL
AND	35 T	30)-49	DENSE DENSE Y DENSE	5-8 M/STIFF SILI 9-15 STIFF SAN 16-30 V-STIFF 31+ HARD		NATURAL BACKFILL	BEDF	ROCK +++++

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ΕA	RTH	E)	T E C	H	PROJECT:	BORING NU	MBER	MW-15D)
4	-	American New Yorl	Boulevard k 12110		Southside High School Elmira, New York	SHEET PROJECT #	2 OF 6837 FILE	4	
	IG COMP	ANY		GeoLogic,			side of school bldg	g	
FORE EARTI	MAN H TECH II	NSPECTO	DR	Scott Paul Sleas	GROUND EL man DATE STAR		DATE END	ED4/30)/03
SIZE		CASING NA	TYPE		<u>APLER</u> lit Spoon OTHER:	DATE		TER READINGS	
HAMN FALL	IER	NA	HAMM	1ER1	40 lb 4¼" I.D. Aug 30"	DATE ers 5/7/03 09:00	DEPTH 17.0' Top of Casing	CASING STA	BILIZATION
		SAMF	PLE	*********			STRATA		
	NO.	REC.	DEPTH	BLOWS	SAMPLE DESC	RIPTION	CHANGE AND GENERAL DESCRIPTION	FIELD TESTING OVM (ppm)	EQUIPME WEL INST <u>AL</u>
20'	11 7	1.0'	20'-22'	30-18-12-15	Fine-crs GRAVEL, little(-) brow	n fine-crs Sand, wet.	20'-21'	0	
	12	0.3'	22'-24'	23-9-6-9	Brown-black-gray-red fine-crs S Gravel, wet.	SAND, and fine-crs	22'-22.3'	0	
	13	0.7'	24'-26'	12-14-8-8	Brown-black-gray-red fine-crs S Gravel, wet. Brown med SAND, wet.	SAND, and fine-crs	24'-24.3' 24.3'-24.7'	0	
25'	14	0	26'-28'	12-12-10-6	No Recovery.				
	15	2.0'	28'-30'	40-27-23-20	Brown med SAND, wet, no odo Brown fine(+)-crs SAND, some	or. I fine-crs Gravel, wet.	28'-28.2' 28.2'-30'	0 0	
30'	16	1.3'	30'-32'	12-6-4-5	Fine-crs GRAVEL, and brown f downward), wet.	fine-crs Sand (coarsens	30'-31.3'	0	
au 18	17	1.4'	32'-34'	12-10-20-11	Brown fine-crs SAND, wet. Brown fine-crs SAND, and (-) fi	ine-crs Gravel, wet.	32'-33.4'	O	
35'	18	0.7'	34'-36'	28-25-15-13	Brown fine-crs SAND, and fine	-crs Gravel, wet.	34'-34.7'	0	
	19	0.9'	36'-38'	20-18-16-19	Same. (GLACIAL OUT	74/0541	36'-36.8'	. 0	
				- 14	Brown Silty CLAY, moist.		36.8'-36.9'	0	
	20	0.3'	38'-40'	7-5-5-6	Same.		38'-38.3'	0 0	
40'	21	0.8'	40'-42'	2-3-4-3	Brown-gray Silty CLAY, moist.		40'-40.8'	0	
	22	0.9'	42'-44'	2-3-3-2	Gray Silty CLAY, moist.	STRINE)	42'-42.9'	NR	
PROF	ORTIONS U	SED		PENETRATION	RESISTANCE	WELL CONSTRUCT		1	J
TRACE LITTLE SOME	10 T 20 T	O 20% 0- O 35% 5-	OHESIONLES -4 VERY -9	<u>S DENSITY</u> (LOOSE LOOSE	COHESIVE CONSISTENCY 0-2 VERY SOFT 3-4 SOFT		CONCRETE	GRO	UT ===
AND	35 T	30	D-49	DENSE DENSE DENSE	5-8 M/STIFF SIL	LICA	NATURAL BACKFILL	BEDF	ROCK ++-

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E A	RTH	1	EC	н	PRO	JECT:	B		MBER	MW-15E)	
4	0 British A Latham,					High School New York	SHEI PRO		3 OF	4		-
ORE	IG COMP/ MAN H TECH IN		R	GeoLog Sc Paul Sie	ott	BORING LOG GROUND EL DATE STAR	EVATIC		side of school bid		0/03	
		CASING			AMPLER					TER READINGS		
SIZE HAMM FALL	ER	NA - NA NA	TYPE HAMM FALL		Split Spoon 140 lb 30"	0THER: 4¼" I.D. Aug	ers	DATE 5/7/03 09:00	DEPTH 17.0' Top of Casing	CASING STA 2" PVC	BILIZATI	ON TIME
		SAMPLI							STRATA			
	NO.	REC.	DEPTH	BLOWS		SAMPLE DESCR	RIPTION		CHANGE AND GENERAL DESCRIPTION	FIELD TESTING OVM (ppm)	۱ N	PMENT (VELL TALLED
45'	23 7	0.8'	44'-46'	2-2-2-2	Gray Silty CL	AY, moist.			44'-44.8'	NR		=
	24	1.3'	46'-48'	0-1-2-3	Same.				46'-47.3'	NR		= = = =
	25	1.8	48'-50'	1-1-2-3	Same.				48'-49.8'	NR		=
50'	26	1.3	50'-52'	0-1-2-2	Same.				50'-51.3'	NR		= =
	27	2.0'	52'-54'	0-2-2-3	Same.				52'-54'	NR		
	28	[.] 1.6	54'-56'	0-0-2-3	Same.				54'-55.6'	NR		
55'	29	2.0'	56'-58'	0-0-3-4	Same.				56'-58'	NR		= = = =
	30	2.0'	58'-60'	2-3-4-5	Same.				58'-60'	NR		=
60'	31	2.0'	60'-62'	2-3-3-4	Same.				60'-62'	NR		= = =
	32	2.0'	62'-64'	2-3-4-5	Same.				62'-64'	NR	61.6'-	= - E E
65'	33	2.0'	64'-66'	2-2-3-3	Same.			-	64'-66'	, NR		Ē
	34	2.0'	66'-68'	1-1-3-6	Same.				66'-68'	NR	65.5'-	
	35	1.7'	68'-70'	2-2-3-3	Same.	(GLACIO LACUS		100 - EV 7	68'-69.7'	NR		
PROP	ORTIONS US	ED	14010		ON RESISTANCE			<u>CONSTRUCT</u>				
TRACE LITTLE SOME AND	10 T(20 T(20% 0-4 035% 5-9 050% 10	DHESIONLES VERY 29 -29 MED -49		30° ON 2° O.D. SA <u>COHESIVE CO</u> 0-2 V 3-4 5-8 9-15 16-30 31+	NSISTENCY ERY SOFT SOFT SIL	ICA		ATURAL BACKFILL	GRC BED	ROCK	+++++

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E A	RTH	Ð ,	E C	н	PROJECT:	BORING NUN	1BER	MW-1	5D
4	0 British A Latham,				Southside High School Elmira, New York	SHEET PROJECT #6	4 OF		4
FORE	G COMP/ MAN I TECH IN)R	GeoLogic, Scott Paul Sleas	GROUND ELE	VATION	side of school bldg		4/30/03
SIZE HAMM		CASING NA NA NA	TYPE HAMM FALL	2" Spl IER 14	<u>IPLER</u> lit Spoon_OTHER: 40 lb4¼" I.D. Auge 30"	DATE rs 5/7/03 09:00	GROUNDWA DEPTH 17.0' Top of Casing	TER READIN CASING 2" PVC	NGS STABILIZATION TIME
FALL				······································		00.00			
	 NO.	SAMP REC.	LE T DEPTH	BLOWS	SAMPLE DESCR	IPTION	STRATA CHANGE AND GENERAL DESCRIPTION	FIELD TES	
70'	36	2.0'	70'-72'	3-4-8-5	Gray Silty CLAY, moist.		70'-72'	NR	INSTALLED
	٦								-
	37	1.1'	72'-74'	6-9-15-15	Same. (GLACIO LACUS) Gray SILT and fine-med Sand, a		72'-72.6'	NR	
					wet.	ind me-cra graver,	12.0-10.1		
75'	38	0.8'	74'-76'	35-30-18-90	Gray Silty CLAY, and (+) fine-cr. shale fragments).	s Gravel (abundant	74'-74.8'	NR	-
	39	0.8'	76'-78'	30-100/0.4'	Gray fine-crs gravel, and Silty C (GLACIAL TILL OR WEATHE		76'-76.8'	NR	76.5'- 77.0'-
					END OF BORING TOTAL BORING DEPTH = 77.0 4/30/03 12:15	;' .		65.0'-65.5':	Grout Bentonite Seal #00 Silica Choke Sand #0 Silica Filter Pack
80'								0-66.5: 66.5'-76.5':	2" I.D. PVC Riser Pipe 2" I.D. PVC Well Screen (0.01" slot)
-									
85'									
								-	
90'									
	1					WELL CONSTRUCT	ION LEGEND		
TRACE	10	TO 10% C TO 20% 0	OHESIONLE	SS DENSITY IY LOOSE	ON 2" O.D. SAMPLER BE <u>COHESIVE CONSISTENCY</u> 0-2 VERY SOFT			A	GROUT
SOME		TO 50% 1 3	0-49	LOOSE D. DENSE DENSE XY DENSE	3-4 SOFT 5-8 M/STIFF SIL 9-15 STIFF SA 16-30 V-STIFF 31+ HARD	ICA ND	NATURAL BACKFILL		BEDROCK ++++++

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Ge		nteo sultant			BORING E	3723 1 OF 2
		ts innovato				
	NT _U	-				
			R MN0832			
			4/13/17 COMPLETED 4/13/17			
			le Technical Services, LLC			
				TOP OF CASING ELEVATION		
			DD _2" x 5' Macrocore			
			obe		CHECKED BY DRAFT	
DEPTH (ft)	RUN RECOVERY	GRAPHIC LOG	MA	ATERIAL DESCRIPTION		(mqq) DIA
		1 <u>., 1</u>	Fill, wood chips			
			Stiff, SILT, SILT, moist, brown, Topsoil			
-						
-			Stiff, GRAVELLY SILT, SILT, some gravel, and	coarse sand, moist, dark brown, non plas	tic	3.7
-						
-						
2.5 -						
2.5						
-						
	11					4
-						
-						
			Light orange, Cement			
-		A 4 4				
5.0 -			Brown, Wood			
2.0			LEAN CLAY, LEAN CLAY, moist, gray, medium	plasticity		5.6
-		<u>ل</u> يلك	LEAN CLAT, LEAN CLAT, moist, gray, medium			
		SHIA	Dense, SILTY GRAVEL WITH SAND, GRAVEL		/	
-		XXX	Red brick			
-						
	11					
-						
						3.3
7.5 -	11					
-						
			Mixture of soil, wood, cement, and brick (interpe	ted as fill)		
-						
			Modium donco SILTY SAND WITH CDAVEL	CAND with fine grouped fine to second and	nod moist dark brown low to	
			Medium dense, SILTY SAND WITH GRAVEL, S medium plasticity	אטאש, with line gravel, fine to coarse grai	neu, moist, dark prown, low to	
-			······ · · · · · · · · · · · · · · · ·			5.7
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(Continued Next Page)

Geosyntec consultants	D	BORING B723 PAGE 2 OF 2
engineers scientists innovators		
CLIENT Unisys		Former Sperry Remington North
PROJECT NUMBER	MN0832 PROJECT LOCAT	ION _Elmira, New York
DEPTH (ft) RUN RECOVERY GRAPHIC LOG	MATERIAL DESCRIPTIO	N (judd)
	Medium dense, SILTY SAND WITH GRAVEL, SAND, with fine gravel, f medium plasticity (continued)	fine to coarse grained, moist, dark brown, low to
		5
	Medium dense, CLAYEY SAND, SAND, with clay, fine to coarse graine	ed, moist to wet, dark brown
		9.5
-	Dense, SILTY GRAVEL WITH SAND, GRAVEL, with silt, and fine to co	parse sand, moist to wet, dark brown to gray
		4.7
7.5	Loose, POORLY GRADED GRAVEL, GRAVEL, wet, dark brown	4.9
	Medium dense, WELL GRADED GRAVEL WITH SILT AND SAND, GR brown	AVEL, with silt, and fine to coarse sand, wet, 3
0.0	Bottom of borehole at 20.0 f	feet.
-		

Geosyntec ▷ consultants 5/18/19	BORING LOG BORING NO. SSHS-B C SHEET OF
Top (Depth) Feet Lithology Log 14 Brown growel a Saul + Silt. Cosse - m. derlse Vnei st. creft	Graphic Log Depth Scale → SPT Blows/6* Run (No.) Rec. (%) Drilling Log O. C Image: Second Scale
16 brown growel wet up shad	2.0 V V V
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	Image: Section of the section of th
)	

Geosyntec consultants			_	IG L	_		
	SITE FO	rmer	Spe	erry Rei	mingt	on N	Borehole Location Sketch Map
METHOD & TOOLS: Geoprobe	PROJE	CT NO.	; M	N0832	E/16/	01	
RIG:	N;			E:			
BIT DIAMETER: DRILLER:	SUPER	VISOR					
	DATE:	5/1	8	19			
Top Feet Lithology Log	Graphic Log	Depth Scale	Well	SPT Blows/6*	Run (No.)	Rec. (%)	Drilling Log
	-				2	41	A
hy	_					-16	7
10 0- 11 1 1	0.1				- 7	1.	1.11
16 thous silly govel, uset	0.0		H			20	124
1005g some song.	00						
	Oil						
15						1	
SAA.	0.2	1				61	24
						-	
20	-		=		-	20	k
						6	DZ/
X 3 Step of per	Som	ed	6	06			
14-10 intervert.	76	no	9	n	Mai	1e	rial
- Cal lipoli	-	-	1			-	
			-			-	
	-	_	-			-	
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			-			-	
	-		-				
0	-	1	1	-			

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Geo	consultants	5/18/19	В	OR		IG L	.00	6	BORING NO. SSHS-B
Top (Depth)	Brown sills Motor, m. dens	Lithology Log w/ Send & Gurdel e	Graphic Log	Depth Scale	Well	SPT Blows/6*	Run (No.)	Rec. (%)	Drilling Log
15.	Gravel. brown Course, some		0.3 0.7			*	15	5	
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Geosyntec C consultants	BORING LOG BORING NO. SSHS-B 26 SHEET OF
DRILLING CO.: Cascade Environmental Status: METHOD & TOOLS: Geoprobe	SITE Former Sperry Remington N PROJECT NO.: MN0832E/16/01
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Geosyntec S/16/19 BORING NO. SSHS-B 2014 **BORING LOG** Graphic Log Feet Run Rec. (No.) (%) Top (Depth) SPT Depth Blows/6* Drilling Log Lithology Log Scale 61 12/21 121 Brown send of Gravel. Moist to wet loose. Frace 0. 0. 16. Brown growel w/ serel Just loose, Jouer silt. 2/24 0.1 0.0 18-3 step of83

T-60 Geosyntec[▷] BORING NO SSHS-B **BORING LOG** SHEET OF consultants SITE Former Sperry Remington N Borehole Location Sketch Map DRILLING CO.: Cascade Environmental Status Well Installed Phyged & Abdad PROJECT NO .: MN0832E/16/01 METHOD & TOOLS: Geoprobe N: RIG E BIT DIAMETER: DRILLER SUPERVISOR: **GROUND ELEV.:** Surveyed Estimated DATE Top (Depth) Deters Run Rec Graphic Depth Vell SPT Lithology Log **Drilling Log** Log Scale Blows/6* (No.) (%) 1414 14 60 r O. 0.1 15 off. 28 Considering 18

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