APPENDIX D GROUNDWATER FIELD SHEETS





BORING NO. 016_E019

WELL NO. 016_ MW01

Data(a) of Dav	allation	8/22/11	2/25/		Screened Interval(s)	۳.5- ^و	7.5 ' 693
Personnel/Con	npany	M. Franc	15 R- Teto	a Tech A	otal Length of Well Ca Measured Total Depth	(TOC) Initial	8.85' 643
				_	Sidel Danib to Mates		8.85' 693
Type of Rig Us	sea			II	nitial Depth to Water	i i a fa « Data	<u>8/23/11</u> Time 165
				, , , , , , , , , , , , , , , , , , ,	Stabilized Denth to Wa	ter O	כטי אווווי ייונאומ
				C	TOC)	Date	Time
	DEVE	ELOPMENT					
TECHNIQUE(S	<u>S)</u> <u>E</u> :	QUIPMENT TYPE/CA	APACITY		<u>PURGE V</u>	OLUME CALCUL	ATION
Jetting (A				_	Casing Volume:	Ft. of v	vater
_X Surge Blo	ock					Gallon	
Bailing		h 3		_	=	Gallon	s per Single Casing Volume
Pumping		I have pump			Sand Pack	volume:	Ft. of Saturated Sand Paci s/Foot (borehole diameter)
Other				_		Gallon	
	FLUI	OS ADDED					s of Casing Volume
					=	x 0.3 (Assuming porosity = 30%)
Lost Drilling Flo	uid:	Gall	ons		=	Gallon	s Within Sand Pack
		Gall		5	Single Purge Volume:		Gallons (Casing Vol. +
Water During I	nstallation:	Gall			r: 5 V.		Sand Pack Vol. + Fluids A
Lotal Fluids Ad	10e0:	Gall			/linimum Purge Volum Actual Purge Volume:		
Ground Water	eu water Quality Parai	meters of			olume Measured by:		Gallons
Added Water N		Y N		, F	Rate of Development	Gallor	ns/Minute (Hour Day)
			N.I				
Sample Collect	ted of Added	Water: Y	N	r	rumping Kate/Depth		(a) Ft. (Below Grd.
		Water: Y ed Water:	IN	I	rumping Rate/Depth mmiscible Phases Pre	esent: Y N	@ Ft. (Below Grd. Thickness
					mmiscible Phases Pre	esent: Y N	@ Ft. (Below Grd. Thickness
Sample Design	nation of Add	ed Water:		I	mmiscible Phases Pre CALIBRATION	esent: Y N	@Ft. (Below Grd. Thickness
Sample Design	nation of Add	ed Water:		NSTRUMENT (Conductance M	mmiscible Phases Pre CALIBRATION eter:	esent: Y N	@ Ft. (Below Grd. Thickness
pH Meter: pH 4.0 =	nation of Add	ed Water: °C	Spec. C	NSTRUMENT (Conductance M Standard Reading	mmiscible Phases Pre CALIBRATION eter: μmhos/cm	@ 25°C	Thickness
pH Meter: pH 4.0 = pH 7.0 =	nation of Add	ed Water:°C	Spec. C	NSTRUMENT (Conductance M Standard Reading	mmiscible Phases Pre CALIBRATION eter: μmhos/cm	@ 25°C	Thickness
pH Meter: pH 4.0 =	@	ed Water: °C °C °C	Spec. C	NSTRUMENT (Conductance M Standard Reading	mmiscible Phases Pre CALIBRATION eter:μmhos/cm	@ 25°C	Thickness
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@ gen Meter:	ed Water:°C°C°C°C°C	Spec. C	NSTRUMENT (conductance M Standard Reading Meter: Other:	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @	Thickness °C °C Clarity, Odor, PID Readings
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@@	ed Water:°C°C°C°CofTime arge	Spec. C Turbidity Temp	NSTRUMENT (conductance M Standard Reading Meter: Other: pH	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O.	Thickness °C °C Clarity, Odor, PID Readings Other:
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@	ed Water: °C	Spec. C Turbidity Temp	NSTRUMENT (conductance M Standard Reading Meter: Other: pH	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O.	Clarity, Odor, PID Readings Other:
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@	ed Water: °C	Spec. C	NSTRUMENT (Conductance M Standard Reading Other: H pH Any aft	CALIBRATION eter: μmhos/cm for:6a U-53 Specific Conductance	@ 25°C µmhos/cm @ Turbidity or D.O.	Clarity, Odor, PID Readings Other:
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@	of Time 1700 *1715	Spec. C	NSTRUMENT (Conductance M Standard Reading Other: H pH Any aft	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O.	Clarity, Odor, PID Readings Other:
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@	ed Water: °C	Spec. C Turbidity Temp	NSTRUMENT (conductance M Standard Reading Meter: Other: pH Any aft	CALIBRATION eter: μmhos/cm for:6a U-53 Specific Conductance	@ 25°C µmhos/cm @ Turbidity or D.O.	Clarity, Odor, PID Readings Other: Very turb: 1, do
pH Meter: pH 4.0 = pH 7.0 = pH 10.0 = Dissolved Oxyo Total Volume Discharged	@@	of Time 1700 *1715	Spec. Control of the special s	NSTRUMENT (Conductance M Standard Reading Other: H pH Any aft	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O.	Clarity, Odor, PID Readings Other: Very turb: 1, do
pH Meter: pH 4.0 = pH 7.0 = pH 10.0 = Dissolved Oxyg Total Volume Discharged	@@	of Time arge 1700 *1715 *1735	Turbidity Temp Purged 25, 30 23,74	NSTRUMENT (conductance M Standard Reading Meter: Other: pH Any aft	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O. trecharge >1000	Clarity, Odor, PID Readings Other:
pH Meter:pH 4.0 =pH 7.0 =pH 10.0 =Dissolved Oxyg	@@	of Time arge 1700 *1715 *1735 1337 1348 1358	Spec. Control of the special s	NSTRUMENT (Conductance M Standard Reading Meter: Other: H	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O. trechorge > 1000 > 1000 > 1000 > 1000	Clarity, Odor, PID Readings Other: Very turb: 1, do
pH Meter: pH 4.0 = pH 7.0 = pH 10.0 = Dissolved Oxyo Total Volume Discharged	@@	of C C C C C C C C C C C C C C C C C C C	Temp Puzaed 25, 30 23,74 22,54 21,41 21,78	NSTRUMENT (Conductance M Standard Reading Other: Other: F	Specific Conductance 1.67 1.74 2.01 2.02	@ 25°C µmhos/cm @ Turbidity or D.O. trechorge > 1000 > 1000 Control of the	Clarity, Odor, PID Readings Other: Very turb: 1, do
pH Meter: pH 4.0 = pH 7.0 = pH 10.0 = Dissolved Oxyo Total Volume Discharged	@@	of Time arge 1700 *1715 *1735 1337 1348 1358	Spec. Control of the special s	NSTRUMENT (Conductance M Standard Reading Other: Other: F	mmiscible Phases Pre CALIBRATION eter:	@ 25°C µmhos/cm @ Turbidity or D.O. trechorge > 1000 > 1000 > 1000 > 1000	Clarity, Odor, PID Readings Other: Very turb: 1, do

Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.

* Puget dy after ~2 mm, (ct recharge



BORING NO	-11	Fal	9
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WELL NO. 016 - MWOI

Project Project No		JETE A	16		Casing Diameter/Type Borehole Diameter	፥ <u> </u>	5'.9.5' 6gs
Date(s) of Install	ation			<u>.</u>	Screened Interval(s)	Й.	5'.9.5' 695
Date(s) of Devel	opment S	23/11 &	8/25/11		Total Length of Well C	, aoin ig	5'
Personnel/Comp	any	nM, From	cus Q. Te	tratech	Measured Total Depth		8.25. 642
Type of Rig Used	d				Initial Depth to Water		
					(TOC) 3.41 TtC Stabilized Depth to W	H.10'60sDate	8/23/11 Time 1655
					(TOC)		Time
TECHNIQUE(S)	<u>DEVELOPN</u> <u>EQUIPN</u>	<u>//ENT</u> //ENT TYPE/C	APACITY			VOLUME CALCU	LATION
Jetting (Airl	iff\						
Surge Bloc					Casing Volume:	Ft. of Gallor	water os/Foot
` Bailing					<u></u>	Gallor	ns per Single Casing Volume
Pumping	$-\omega$	rale pum	p		Sand Pack	: Volume:	Ft. of Saturated Sand Pa
Other			P		Х	Gallor	ns/Foot (borehole diameter)
	FLUIDS AD					Gallor	
	<u>I COIDO AD</u>	DED					ns of Casing Volume (Assuming porosity = 30%)
Lost Drilling Fluid	l:	Gal	lons		=	Gallor	ns Within Sand Pack
Lost Purge Wate	r:	Gal	lons		Single Purge Volume:		Gallons (Casing Vol. +
Water During Ins	tallation:	Gal	lons				Sand Pack Vol. + Fluids
Total Fluids Added Source of Added	BG:				Minimum Purge Volum	ne:	Gallons
Ground Water Qu					Actual Purge Volume:		Gallons
Added Water Me					Rate of Development	Gallo	ns/Minute (Hour,Day)
Sample Collected			Ν		Pumping Rate/Depth		(a) Ft. (Below Gr
Sample Designat	ion of Added Wa	ter:			Immiscible Phases Pr	esent: Y N	Thickness
			<u> </u>	NSTRUMENT	CALIBRATION		
pH Meter:			Spec. (leter:		
pH 4.0 =	@	°C			μmhos/cm		
pH 7.0 = pH 10.0 =	@	°C	Turbidit	Meter:		_ μmnos/cm @	*U
Dissolved Oxyge			- raibidity	Other:	Hor:6a 4-!	52	
Total Volume	Rate of	Time	Temp	рН	Specific*	Turbidity	Clarity, Odor, PID Reading
Discharged	Discharge I G P M	1625	3145	6.55	Conductance	or D.O.	Other:
	100	1645	21.33	6.51	3.10	309	83
	 	1727	21,41	6.61	2.08	362	70
		1420	I 🛎 .	6.57	2,10	303	77
		1910			3.09	251	84
		1945	20.93	6.67	2.10	1	
	1	2040		6.60		137	82
	1,7		20.92	6.63	2.11	75	90
	- V	2100	21.59	6.5	3.12	100	93
			1	ļ		ļ	<u> </u>
			1 .	l	i		

Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.





BORING NO. OLG - Gol S

WELL NO. 016_MW02

Project P	PG Site G	P1 (asing Diameter/Type	3,,					
Project No Date(s) of Installa	tion O . I				orehole Diameter _	g" -	•				
Date(s) of Develo	nmont G	18-11 18-11			creened Interval(s) _ otal Length of Well Ca	4.5- 9 sing 5°	.5	· · · · · · · · · · · · · · · · · · ·			
Personnel/Compa			-Telus To		leasured Total Depth (Terr Initial	9.15 %				
Cr30micr00mpa	III)				leasured Total Deptil (Final		<u>, </u>			
Type of Rig Used	No)			nitial Depth to Water	ı ınaı _					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					100 3.90	Date	3-19-11	Time 10:30			
					tabilized Depth to Wat						
								Time			
	DEVELOPA	MENT		ν.	/						
ECHNIQUE(S)	EQUIPA	MENT TYPE/CAF	PACITY		PURGE VO	OLUME CALCU	_ATION				
1 a 441 a a 7 A 1 a 114	[4]			•		E	,				
Jetting (Airlif					asing Volume:						
✓ Surge Block					x	Gallor		2 i 1/-1			
Bailing				_	=	Gallor	is per Single (Jasing Volume			
Pumping Other	www	e pump				/oldine:	rt. of Sa	turated Sand Pack			
Oulei				_	x		ns/Foot (boreh				
	FLUIDS AD	DEU			<u>-</u>	Gallor Gallor	is (iii building)	5) Volumo			
	I LUIDS AD	<u> </u>			- <u></u>	Gallor x 0.3 (is of Casing V	rocity = 30%\			
ost Drilling Fluid:		Gallo	ns		=	X 0.3 (Gallor	roouring po Nithin Can	d Pack			
		Gallo		ç	ingle Purge Volume: _	GallOI	is vviitiiti salk Gallone i	Casing Vol +			
Vater During Insta	allation:	Gallo			migic range volunie			ck Vol. + Fluids Added)			
otal Fluids Adde	d:	Gallo		M	finimum Purae Volume	ā.		ick voi. • i luius Audeu)			
Source of Added \	Water:			 A	Minimum Purge Volume: Gallons Actual Purge Volume: Gallons						
Ground Water Qu		of		_ :·	Actual Purge Volume: Gallons Volume Measured by:						
dded Water Mea				R	tate of Development	Gallo	ns/Minute (Ho	our Day)			
Sample Collected			N	P	umping Rate/Depth	Ou	@	Ft. (Below Grd.)			
ample Designati				lr	nmiscible Phases Pres	sent: Y N	Thicknes	SS			
											
			<u>IN</u>	STRUMENT C	CALIBRATION						
H Meter:			Spec. Co	onductance Me	eter:	2.020					
H 4.0 =	@	°C		Standard	μmhos/cm@	D) 25°C					
H 7.0 =	@	•0	- 1.10		F	ımhos/cm @	°C				
H 10.0 =			lurbidity	Meter:	and 14.50	· · · · · · · · · · · · · · · · · · ·					
issolved Oxygen	Meter:				ortha W-52						
Total Volume	Rate of	Time	Temp	pН	Specific*	Turbidity		lor, PID Readings,			
Discharged	Discharge	1			Conductance	or D.O.	Other:				
*******	LGPH	1230									
		1232	22.39	7,73	2.04	191	Grung	wen's lightly tub			
		1236	21,54	7.23	205	38	Storm	LANGE SPONTE			
	4	18.34	21,07	7.02	3.10	13.8	0				
		1244	2090	6.41	2.27	1.3		***************************************			
		1 	20.71		235	0.0	+				
-		1249	JU. /1	6.40	2013	V.U					
							<u> </u>				
	1	1						,,			
, ,		1	1			t .	1				

^{*} Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.





BORING NO. OLG HOLL

WELL NO. 016_ MW03

Project No.	PPG	Site 016	-		Casing Diameter/Type Borehole Diameter	<u>۵٬٬</u> ρ	VC
Date(s) of Install	lation 8/1	17/11			Screened Interval(s)	<u> </u>	9.5' 6,96
Date(s) of Devel	opment	High			Total Length of Well Ca	sing 5	1.2 694
Personnel/Comp	pany	m M. Free	cis D - T	Hm Tech	Measured Total Depth (TOC) Initial	4.3, 602
·				,,,	medeared rotal Boptin	Final	7-3-
Type of Rig Used	d			-4	Initial Depth to Water		
						Date	Time
					(TOC) 420' 698 Stabilized Depth to Wat	er	
					(TOC)	Date	Time
	DEVELOPI	MENT			7		
TECHNIQUE(S)	EQUIPM	MENT TYPE/CA	PACITY		PURGE VO	DLUME CALCUL	ATION
Jetting (Air	lift)				Casing Volume:	Ft of v	vater
Surge Bloc						Gallon	
Bailing							s per Single Casing Volume
Pumping	Wha	e pump			Sand Pack V	/olume:	Ft. of Saturated Sand Pack
Other		7			X	Gallon	s/Foot (borehole diameter)
				_		Gallon	
	FLUIDS AD	DED				Gallon	s of Casing Volume
					=	x 0.3 (/	Assuming porosity = 30%)
Lost Drilling Fluid	d:	Gallo	กร		=	Gallon	s Within Sand Pack
ost Purge Wate	er:	Gallo					Gallons (Casing Vol. +
Water During Ins	tallation:	Gallo					Sand Pack Vol. + Fluids Added)
Total Fluids Adde	ed:	Gallo			Minimum Purge Volume	: :	
	Water:				Actual Purge Volume:		Gallons
	uality Parameters	of			Volume Measured by: _	······································	Gallette
Added Water Me					Rate of Development	Gallor	ns/Minute (Hour Day)
Sample Collected	d of Added Water	; Y	N		Pumping Rate/Depth		@ Ft. (Below Grd.)
Sample Designat	tion of Added Wa	ter:			Immiscible Phases Pres	sent: Y N	Thickness
			11	ICTOLIMENT			
oH Meter:			Spec. C	onductance I	CALIBRATION Meter:		
рН Meter: рН 4.0 =	. @	°C		Standard	μmhos/cm@	0.25°C	
ρH 7.0 =	@	°C		Reading		mhos/cm @	°C
oH 10.0 =		°C	Turbidity				
	n Meter:			Other:	toriba 4-52		
Total Volume	Rate of	Time	Temp	На	Specific*	T. odlidk.	Clarity Oder DID Desting
Discharged	Discharge	1 3	remb	ŅΠ	Conductance	Turbidity	Clarity, Odor, PID Readings,
Discharged		1915			Conductance	or D.O.	Other:
	~Z GPM						
		6461130	23.60	2.15	2.37	213	gray, turbid, strong.
		1925	21.44	7,44	2.74	40.5	Sulfurens aday
		1930	20.18	7.72	7.81	36.0	
		1935			2.79		
 	Ť	1 1735	20.19	7.76		43.6	
						ue v	4
		1937	20.24	7.56	2,79	95.0	
			20.34 20.30	7.56 7.18			
		1937			2.79	51,4	
		1937					
		1937	20.30	7.18	2.79	51.4	
Development Cor	mpleted at	1940	Q0.30 Gallons Disci	7.78		51.4	





BORING NO. 016_Fa09 WELL NO. 016_MWO4

Project P	a Site o	214		(Casing Diameter/Type	<u> </u>	
Project No					Borehole Diameter	8,,	
Date(s) of Installa		3-11			Screened Interval(s)	2,-10,	6 <u>4</u> s
Date(s) of Develop	oment	-50-1			Total Length of Well Ca	asing <u>5</u>	
Personnel/Compa	ny <u> </u>	MITTE	weiz 18 -	[chatech 1	Measured Total Depth	(TOC) Initial Final	10. 32, 602
Type of Rig Used				<u> </u>	nitial Depth to Water TOC) 3.71 TIC	_	
				(Stabilized Depth to Wa		Time
					TOC)	Date	Time
	DEVELOPA			,	1		i i
TECHNIQUE(S)	EQUIPA	<u>MENT TYPE/CA</u>	PACITY		<u>PURGE V</u>	OLUME CALCUL	<u>ATION</u>
lattina (Aidif	41				Saataa Mataasa		
Jetting (Airlif Surge Block					Casing Volume:		
Bailing						Gallons	s per Single Casing Volume
Pumping	- الما	le Dum		_	Sand Pack	Volume:	Ft. of Saturated Sand Pack
Other		15 bomb		_	Y Y	Gallons	S/Foot (borehole diameter)
				_	=	Gallons	s (in borehole)
	FLUIDS AD	DED	, .				s of Casing Volume
					=	x 0.3 (A	Assuming porosity = 30%)
Lost Drilling Fluid:		Gallo	ons		=	Gallons	Within Sand Pack
Lost Purge Water:		Gallo		5	Single Purge Volume:		Gallons (Casing Vol. +
Water During Insta					ar '		Sand Pack Vol. + Fluids Added
Total Fluids Added	d:	Gallo	ons	V	Minimum Purge Volum	e:	Gallons
Source of Added \					Actual Purge Volume:		Gallons
Ground Water Qua	•			/	/olume Measured by:		
Added Water Mea					Rate of Development		
Sample Collected Sample Designation			N	F	zumping Rate/Depth mmiscible Phases Pre		@ Ft. (Below Grd.)
Sample Designation	on Added Wa	iei		'	mmisciple Phases Ple	Sent. T N	Thickness
			11	ISTRUMENT (CALIBRATION		
pH Meter:					eter:		
pH 4.0 =	@	°C	•	Standard _	μmhos/cm(@ 25°C	*
pH 7.0 =	@	°C		Reading		umhos/cm @	℃
pH 10.0 =	@	°C	Turbidity	Meter:		· · · · · · · · · · · · · · · · · · ·	
Dissolved Oxygen	Meter:		· · · · · · · · · · · · · · · · · · ·	Other: <u>H</u>	esi6a U-52		
Total Volume	Rate of	Time	Temp	рН	Specific*	Turbidity	Clarity, Odor, PID Readings,
Discharged	Discharge		"	1 ***	Conductance	or D.O.	Other:
-	SCAN	1502		•			very tertia gray brow
	(1506	21.85	7.94	2,47	21000	Strong SWE WOUS DO
		1511	20.75	6.49	2,45	436	21.518 510 01015 100
			20.12		3 40		
		1516	, 	4.86	2-48	76.5	
		150019	 	6.84	2.50 2.51	334	
		1522	3001	6.81	d.51	18.3	
		1525		6.79	3.53	18.3	
	7/	1578		6.78	2.55	4.8	
		75.66					
		-					
Danish (2	-1-411	L	0-11 5:		0.74		
Development Com Criteria:	ibietea at		_ Gallons Disci	narged. Date:	2-30-11 Time:		
vureus:					Personnel:		

^{*} Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.



	PPG site	016			Casing Diameter/Type	2" PV	•
Project No.				_	Borehole Diameter	011	
	lation& @				Screened Interval(s)	5 - 10	(0a5
Date(s) of Devel	opment S	3/2011	<u> </u>		Total Length of Well C	asing 5	•
Personnel/Comp	oany 3m	M/ Franc	15 R - Te	<u>tra</u> Tech	Measured Total Depth	· -	
Type of Rig Llee	d				Initial Depth to Water	Final _	
Type of ring ose	u			_	(TOC) 3.20	TIC Date	Time
					Stabilized Depth to Wa		Time
					(TOC)	Date	Time
	DEVELOPM	<u>IENT</u>			()		,,,,,,
(ECHNIQUE(S	<u>EQUIPM</u>	MENT TYPE/CA	PACITY		<u>PURGE </u>	VOLUME CALCULA	ATION
Jetting (Air	lift)				Casing Volume:	Ft. of w	ater
Surge Bloc						Gallons	
Bailing					=	Gallons	per Single Casing Volume
Pumping	Wh	ale pum	P		Sand Pack	Volume:	Ft. of Saturated Sand Pack
Other		<u> </u>	1		x		/Foot (borehole diameter)
					=	Gallons	(in borehole)
	FLUIDS AD	<u>DED</u>				Gallons	of Casing Volume
(B)		.			=	x 0.3 (A	ssuming porosity = 30%)
ost Drilling Fluid	d:	Gallo				Gallons	
Lost Purge wate	er:	Gallo			Single Purge Volume:		Gallons (Casing Vol. +
	stallation: ed:				Minimum Dunna Valua		Sand Pack Vol. + Fluids Added
Source of Added		Gail) IIS		Minimum Purge Volum		
	uality Parameters	of			Actual Purge Volume: Volume Measured by:		Gallons
					volume ivieasured by.		## · // 5 \
Added Water Me	pacured. Y	′ N			Rate of Development	Callon	CAMBUITO (Hour Hou)
			N		Rate of Development	Gallons	
Sample Collecte	d of Added Water	: Y	N		Pumping Rate/Depth		@ Ft. (Below Grd.)
Sample Collecte		: Y		_	Pumping Rate/Depth Immiscible Phases Pro		@ Ft. (Below Grd.)
Sample Designa	d of Added Water tion of Added Wat	: Y	<u>IN</u>	— ISTRUMENT	Pumping Rate/Depth Immiscible Phases Pro CALIBRATION		@ Ft. (Below Grd.)
Sample Collecte Sample Designa	d of Added Water tion of Added Wat	: Y ter:	<u>IN</u>	— ISTRUMENT onductance I	Pumping Rate/Depth Immiscible Phases Pro CALIBRATION Meter:	esent: Y N	@ Ft. (Below Grd.)
Sample Collecter Sample Designa DH Meter: DH 4.0 =	d of Added Water tion of Added Wat	: Y ter:	<u>IN</u>	ISTRUMENT onductance I Standard	Pumping Rate/Depth Immiscible Phases Pro CALIBRATION Meter:	esent: Y N	@ Ft. (Below Grd.) Thickness
Sample Collecter Sample Designa DH Meter: DH 4.0 = DH 7.0 =	d of Added Water tion of Added Water @	er: Y	<u>IN</u> Spec. C		Pumping Rate/Depth Immiscible Phases Pro CALIBRATION Meter:	esent: Y N	@ Ft. (Below Grd.) Thickness
Sample Collecte Sample Designa	d of Added Water tion of Added Wat	: Y ter:	<u>IN</u> Spec. C	STRUMENT onductance I Standard Reading Meter:	Pumping Rate/Depth Immiscible Phases Pro CALIBRATION Meter:	esent: Y N	@ Ft. (Below Grd.) Thickness
Sample Collecter Sample Designa DH Meter: DH 4.0 = DH 7.0 = DH 10.0 =	d of Added Water tion of Added Wat	er: Y	<u>IN</u> Spec. C	STRUMENT onductance I Standard Reading Meter:	Pumping Rate/Depth Immiscible Phases Pro CALIBRATION Meter:	esent: Y N @ 25°C µmhos/cm @	@ Ft. (Below Grd.) Thickness
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = Ohissolved Oxyge	d of Added Water tition of Added Water @ @ *	er: Y	Spec. C	ISTRUMENT onductance N Standard Reading _ Meter: Other:	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phase	esent: Y N	@ Ft. (Below Grd.) Thickness °C
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = Oissolved Oxyge Total Volume	d of Added Water tion of Added Water @	er: Y	Spec. C	ISTRUMENT onductance N Standard Reading Meter: Other:	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phase Phases Procedure Phases Phases Proc	esent: Y N @ 25°C µmhos/cm @	@ Ft. (Below Grd.) Thickness °C Clarity, Odor, PID Readings,
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of Added Water @	er: Y	Spec. C	ISTRUMENT onductance N Standard Reading _ Meter: Other:	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phase Phases Procedure Phases Phases Proc	esent: Y N @ 25°C µmhos/cm @	@ Ft. (Below Grd.) Thickness °C Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = Oissolved Oxyge Total Volume	d of Added Water tion of Added Water @ ° @ ° en Meter: Rate of Discharge	PC C Time	Spec. C Turbidity Temp	ISTRUMENT onductance N Standard Reading Meter: Other:	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases Phases Procedure	Turbidity or D.O.	@ Ft. (Below Grd.) Thickness °C Clarity, Odor, PID Readings,
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	@@@@@	Time 10:14 10:18	Spec. C Turbidity Temp 23.18	ISTRUMENT onductance I Standard Reading _ Meter: _ Other: _ pH 7.1 & 7.1 S	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases Phases Procedure	Turbidity or D.O.	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of Added Water @	Time 10:07 10:14 10:18	Turbidity Temp 23.18 21.37	ISTRUMENT onductance I Standard Reading _ Meter: _Other: pH 7.18 7.15	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O.	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of Added Water @@	Time 10:07 10:14 10:18 10:28	Turbidity Temp 23.18 21.37 21.40 24.26	ISTRUMENT onductance I Standard Reading _ Meter: _ Other: _ pH 7.18 7.15 7.21	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O.	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of Added Water @ @ en Meter: Rate of Discharge AGPM AGPM AGPM AGPM AGPM	Time 10:07 10:14 10:18 10:28 10:30	Temp 22.18 21.37 21.40 21.15	ISTRUMENT onductance N Standard Reading _ Meter: _ Other: _ pH 7.18 7.15 7.17 7.17	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O. > 1000 157 126 34.95	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of A	Time 10:07 10:14 10:18 10:26 10:36	Temp 23.18 21.15 21.15 21.36	ISTRUMENT onductance N Standard Reading Meter: Other: pH 7.18 7.15 7.21 7.17 7.13	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O. 7 1000 157 126 31.8 97.2	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of Added Water tion of Added Water @	Time 10:07 10:14 10:18 10:28 10:36 10:36	Temp 23.18 21.15 21.15 21.75 21.75	ISTRUMENT onductance I Standard Reading Meter: Other: pH 7.18 7.15 7.17 7.19 7.18	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O. 157 126 34.9 97.2 1000 68.5	Clarity, Odor, PID Readings, Other:
Sample Collecter Sample Designa OH Meter: OH 4.0 = OH 7.0 = OH 10.0 = OH 10.0 = OH 10.0 Total Volume	d of Added Water tion of A	Time 10:07 10:14 10:18 10:26 10:36	Turbidity Temp 23.18 21.15 21.15 21.76 21.15	ISTRUMENT onductance N Standard Reading Meter: Other: pH 7.18 7.15 7.21 7.17	Pumping Rate/Depth Immiscible Phases Proceedings of the Immiscible Phases Procedure Phases	Turbidity or D.O. 7 1000 157 126 31.8 97.2	Clarity, Odor, PID Readings, Other:

Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.





BORING NO. 016_ K007 WELL NO. 016_ MUJO6

Project	PDG Sit	-,-,-			Casing Diameter/Type	e <u>a" p V</u>		
Project No Date(s) of Installa	ation Q	_ 11			Borehole Diameter	<u>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u>	645	
Date(s) of Dovole	nmont S-	- (I		-	Screened Interval(s)		- 63, -	
Date(s) of Develo Personnel/Compa	any 5	MITTO	D. Tat	ro to al	Total Length of Well (Measured Total Deptl		9 70 7	IC 9.00 BGS
- ersonnerroompe	any	MI PIGNE	13 K - 161	IN I ECH	weasured rotal Depti		0.10	
Type of Rig Used	I			_	Initial Depth to Water			
					(TOC) 2,79	Sas Date	8-5-11	Time <u> </u>
					Stabilized Depth to W			
	DE1/E1 00M				(TOC)	Date _		Time
TECHNIQUE(S)	<u>DEVELOPM</u> EQUIPM	<u>ENT</u> ENT TYPE/C/	APACITY		PURGE	VOLUME CALCU	LATION	
lattina (Airli	:tr/							
Jetting (Airling					Casing Volume:			
Surge Block					х	Gallor	ns/Hoot	.
Bailing	. 11 .1	. 0				Gallor		
Pumping	_Whal	C FUM	P		Sand Pack	k volume:		aturated Sand Pack
Other	~~~		***************************************			Gallor		
•	ELLIDO ADO)ED			=	Gallor	ns (in boreho	le)
	FLUIDS ADI	<u>JEU</u>				Gallor	ns of Casing	Volume
Look Delling Clubs		O 11			=	x 0.3	Assuming po	prosity = 30%)
Lost Drilling Fluid:	i	Gall			=	Gallor	ns Within Sar	nd Pack
Lost Purge Water	[;	Gall			Single Purge Volume	·	Gallons	(Casing Vol. +
Water During Inst	taliation:	Gall						ack Vol. + Fluids Added
Total Fluids Adde	ea:	Gall	ons		Minimum Purge Volur	me:	Gallons	
	1A/-4				Actual Durga Valuma	•	(≟allone	
Source of Added 1					Actual Purge Volume	· 	Callons	
Source of Added ¹ Ground Water Qu	uality Parameters			_	Volume Measured by	:		
Source of Added ' Ground Water Qu Added Water Mea	uality Parameters asured: Y	N			Volume Measured by Rate of Development	: Gallo	ns/Minute (H	our,Day)
Source of Added ' Ground Water Qu Added Water Mea Sample Collected	uality Parameters asured: Y I of Added Water:	N Y	N		Volume Measured by Rate of Development Pumping Rate/Depth	: Gallo	ns/Minute (H @	our,Day) Ft. (Below Grd.)
Source of Added ' Ground Water Qu Added Water Mea	uality Parameters asured: Y I of Added Water:	N Y	N	_	Volume Measured by Rate of Development	: Gallo	ns/Minute (H @	our,Day)
Source of Added ' Ground Water Qu Added Water Mea Sample Collected	uality Parameters asured: Y I of Added Water:	N Y	La mala Sanda and	— — ISTRUMENT	Volume Measured by Rate of Development Pumping Rate/Depth	: Gallo	ns/Minute (H @	our,Day) Ft. (Below Grd.)
Source of Added ¹ Ground Water Qu Added Water Mea Sample Collected Sample Designati	uality Parameters asured: Y I of Added Water: ion of Added Wat	N Y er:	<u> </u>		Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION	:Gallo	ns/Minute (H @	our,Day) Ft. (Below Grd.)
Source of Added ¹ Ground Water Qu Added Water Mea Sample Collected Sample Designati	uality Parameters asured: Y I of Added Water: ion of Added Wat	N Y	<u> </u>	onductance l	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	:Gallo	ns/Minute (H @	our,Day) Ft. (Below Grd.)
Source of Added of Ground Water Que Added Water Meas Sample Collected Sample Designation PH Meter: pH 4.0 = pH 7.0 =	uality Parameters asured: Y If of Added Water: ion of Added Water @ @	N Y er: C C	<u> </u>	onductance l Standard	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	: Gallo resent: Y N n@ 25°C	ns/Minute (H @_ Thickne	our,Day) Ft. (Below Grd.)
Source of Added of Ground Water Que Added Water Meas Sample Collected Sample Designation PH Meter: pH Meter: pH 4.0 = pH 7.0 =	uality Parameters asured: Y If of Added Water: ion of Added Water @ @	N Y er: C C	<u>IN</u> Spec. C	onductance I Standard Reading _ Meter:	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	: Gallo resent: Y N n@ 25°C _ μmhos/cm @	ns/Minute (H @_ Thickne	our,Day) Ft. (Below Grd.)
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH Meter: pH 4.0 = pH 7.0 = pH 10.0 =	uality Parameters asured: Y If of Added Water: ion of Added Water	er:C C C	<u>IN</u> Spec. C	onductance I Standard Reading _ Meter:	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter: µmhos/cn	: Gallo resent: Y N n@ 25°C _ μmhos/cm @	ns/Minute (H @ Thickne	our,Day) Ft. (Below Grd.)
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	Jality Parameters Jasured: Y Jof Added Water: Join of Added Water	er:C C C	<u>IN</u> Spec. C	onductance I Standard Reading _ Meter:	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	Gallo resent: Y N n@ 25°C _ μmhos/cm @ Turbidity	ns/Minute (H @ Thickne °C	our,Day) Ft. (Below Grd.) sss
Source of Added of Ground Water Question Added Water Measure Sample Collected Sample Designation PH Meter: pH 4.0 =	uality Parameters asured: Y of Added Water: ion of Added Water: @ on Meter:	N Y er:C C C C	Spec. C	onductance I Standard Reading _ Meter: Other:	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	Gallo resent: Y N n@ 25°C μmhos/cm @	ns/Minute (H @ Thickne	our,Day) Ft. (Below Grd.) :ss
Source of Added of Ground Water Question Added Water Measure Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	Jality Parameters Jasured: Y Jof Added Water: Join of Added Water	er:	Spec. C	onductance I Standard Reading _ Meter: Other:	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	Gallo resent: Y N n@ 25°C _ μmhos/cm @ Turbidity	ns/Minute (H @ Thickne *C	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	Jality Parameters Jasured: Y Jof Added Water: Join of Added Water	N Y er:C C C C	Spec. C	onductance I Standard Reading _ Meter: Other: pH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Meter:	Gallo resent: Y N n@ 25°C _ µmhos/cm @ Turbidity or D.O.	ns/Minute (H @ Thickne *C	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	Jality Parameters asured: Y of Added Water: ion of Added Water: @e @e had been depicted as a sured of Discharge	C C C Time	Spec. C Turbidity Temp	onductance I Standard Reading _ Meter: Other: pH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Pr CALIBRATION Weter:	Gallo resent: Y N n@ 25°C _ µmhos/cm @ Turbidity or D.O.	ns/Minute (H @ Thickne *C Clarity, C Other:	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	Jality Parameters asured: Y If of Added Water: ion of Added Water @e @e m Meter: Rate of Discharge	N Y er:	Spec. C Turbidity Temp 35.84 34.07	onductance Standard Reading _ Meter: Other: pH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the Procedure of the Process of the	Gallo resent: Y N n@ 25°C _ μmhos/cm @ 52 Turbidity or D.O. 71, 79,0	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	allity Parameters asured: Y of Added Water: ion of Added Water: io	N Y er:	Temp 3.5.84 34.07	onductance Standard Reading _ Meter:Other: _ pH 7.45 7.61 7.76	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C _ μmhos/cm @ 52 Turbidity or D.O. 71, 79,0	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	allity Parameters asured: Y of Added Water: ion of Added Water: ion of Added Water: @	Time 1358 1406 1413	Turbidity Temp 35.84 34.07 33.89	onductance Standard Reading Meter: Other: PH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C μmhos/cm @ Turbidity or D.O. 79.0 17.3	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Question Added Water Measure Sample Collected Sample Designation of the Meter: Description of the Meter: Descriptio	allity Parameters asured: Y of Added Water: ion of Added Water: io	N Y er:	Temp 3.5.84 34.07	onductance Standard Reading _ Meter:Other: _ pH 7.45 7.61 7.76	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C _ μmhos/cm @ 52 Turbidity or D.O. 71, 79,0	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	allity Parameters asured: Y of Added Water: ion of Added Water: ion of Added Water: @	Time 1358 1406 1413	Turbidity Temp 35.84 34.07 33.89	onductance Standard Reading Meter: Other: PH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C μmhos/cm @ Turbidity or D.O. 79.0 17.3	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	allity Parameters asured: Y of Added Water: ion of Added Water: ion of Added Water: @	Time 1358 1406 1413	Turbidity Temp 35.84 34.07 33.89	onductance Standard Reading Meter: Other: PH	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C μmhos/cm @ Turbidity or D.O. 79.0 17.3	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,
Source of Added of Ground Water Que Added Water Mea Sample Collected Sample Designation PH Meter: pH 4.0 = ph 7.0 = ph 10.0 = Dissolved Oxygen Total Volume	allity Parameters asured: Y of Added Water: ion of Added Water: @	Time 1358 LHOA LHOA LHOA LHOA LHOA LHOA LHOA LHOA	Turbidity Temp 35.84 34.07 33.89 33.41	onductance Standard Reading Reading Meter: Other: pH 7.45 7.61 7.76 7.76	Volume Measured by Rate of Development Pumping Rate/Depth Immiscible Phases Proceedings of the Process of the P	Gallo resent: Y N n@ 25°C _ μmhos/cm @ 52 Turbidity or D.O. 79,0 17.3 13.0 6.8	ns/Minute (H @ Thickne	our,Day)Ft. (Below Grd.) ess dor, PID Readings,





			WELLD	EVELOPINE	INI DATA SHEE	I	
		BORIN	G NO. <u>() 16 -</u>	<u> 1010</u>	WELL NO.	016_MUO	7
Project Project No. Date(s) of Installat Date(s) of Develop Personnel/Compar	ment %-19	-II	R-Tor	B S	Casing Diameter/Type Borehole Diameter Coreened Interval(s) Otal Length of Well Ca Measured Total Depth	3.5'-8.	3,65° 695
Type of Rig Used					nitial Depth to Water TOC) 3.44 Tエく Stabilized Depth to Wa	3. 37' 6g3 Bate	
TECHNIQUE(S)	DEVELOPM EQUIPM	<u>1ENT</u> 1ENT TYPE/CA	<u>PACITY</u>		TOC)		Time
Jetting (Airlift Surge Block Bailing					Casing Volume: x	Gallons	rater s/Foot s per Single Casing Volume
Pumping Other		ile pump)		x	Volume:Gallons Gallons	Ft. of Saturated Sand Pack s/Foot (borehole diameter) s (in borehole)
Lost Drilling Fluid: Lost Purge Water:		Gallo	ons ons	S	=	x 0.3 (A Gallons	s of Casing Volume Assuming porosity = 30%) s Within Sand Pack Gallons (Casing Vol. +
Water During Insta Total Fluids Added Source of Added V	illation: d: Vater:	Gallo Gallo	ons	A	Minimum Purge Volum Actual Purge Volume:	e:	Sand Pack Vol. + Fluids Added) Gallons
Ground Water Qua Added Water Meas Sample Collected of Sample Designation	sured: Yof Added Water:	′ N : Y	N	F	olume Measured by: Rate of Development Cumping Rate/Depth Commiscible Phases Pre	Gallon	s/Minute (Hour,Day) @ Ft. (Below Grd.) Thickness
pH Meter:		20			eter:	0.0500	
pH 4.0 = pH 7.0 = pH 10.0 = Dissolved Oxygen	@; @;	°C °C	Turbidity	Reading Meter:	µmhos/cm(μmhos/cm @	°C
Total Volume Discharged	Rate of Discharge	Time		pН	Specific* Conductance	,	Clarity, Odor, PID Readings, Other:
	2GPM	1328	23.40	746	3.47	>1000	Venture de over to
	AUTTI	1333	22.79	7.65 7.53	2.33	238	Strand Challenger
		1339	32.35	7.52	2.36	63.3	very took & gray. brom slight swiftwow adar
		134	32.76	7.50	2.37	55.4	
		1345		7.50	2.35	36.9	
	V	1349	22.75	7.48	2.35	16.8	
		1353	23.09	7.46	2,35	21.6	

Development Completed at ~ 1550 Gallons Discharged. Date: 3/19/11 Time: 1355

Criteria: Payaneter Stabilization, low two date Personnel: Tim M. Francis R

* Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.





BORING NO. <u>016_ k01</u>3

WELL NO. 016_MW08

Project	PPG- Site	016			Casing Diameter/Type	2" PV	C	
Project No Date(s) of Installa	-6	121			Borehole Diameter	<u>8''</u>	-8.5	
Date(s) of Installa Date(s) of Develo	ation	>13111			Screened Interval(s)	35-	<u>-8.5</u>	
Date(s) of Develo	opment	14/11	\ 	Εσ. ν.	Total Length of Well C	asing	0 -0	· · · · · · · · · · · · · · · · · · ·
Personnel/Compa	any <u>Jim</u>	M. / Franci	15 R- 19	tralech	Measured Total Depth		8,32	
Type of Rig Used	d				nitial Depth to Water			
					TOC) 4,00		8-9-11	_ Time <u>13:30</u>
					Stabilized Depth to Wa			
	DEVELOPA	AENIT		(TOC)	Date		Time
TECHNIQUE(S)		MENT TYPE/C/	APACITY		PURGE \	VOLUME CALCU	<u>LATION</u>	
Jetting (Airli	ift)			(Casing Volume:	Et of	wator	
Surge Block	1.					Gallo		
Bailing					=	Gallo	ns per Sinale	Casing Volume
Pumping	Wh	de pump)		Sand Pack	Volume:	Ft. of Sa	turated Sand Pack
Other		1 1			x	Gallo	ns/Foot (borel	ole diameter)
					=	Gallo	ns (in borehol	9)
	FLUIDS AD	<u>DED</u>				Gallo		
	1.	.			=	x 0.3	(Assuming po	rosity = 30%)
Lost Drilling Fluid	l:	Gall		,	=	Gallo	ns Within San	d Pack
Lost Purge water	r: tallation:	Gall		ξ	Single Purge Volume:			
Mater During Inst Intel Fluide Adde	ed:	Gall	Ons		Ainimum Duran Valum			ck Vol. + Fluids Added)
Source of Added	Water	Gall	OliS	יו <i>ו</i>	Minimum Purge Volum	ne:	Gallons	
	uality Parameters	of		_	Actual Purge Volume:		Gallons	
Added Water Mea		Y N		, F	/olume Measured by: Rate of Development	Gallo	ns/Minute (Ho	ur Day)
	d of Added Water		N	·	Pumping Rate/Depth	Oano) 1) ອານແທນເຮົາເ (ດ	Ft (Relow Grd)
	ion of Added Wat			 [:	mmiscible Phases Pre	esent: Y N	Thicknes	SS
oH Meter:			Snec C	<u>ISTRUMENT (</u> onductance M	CALIBRATION eter:			
oH 4.0 =	@	°C	Орсс. О	Standard	eter μmhos/cm	@ 25°C	······································	
oH 7.0 =		°Č		Reading _	μπιοσιοπ	umhos/cm @	°C	
oH 10.0 =		°C	Turbidity	Meter:			<u> </u>	
Dissolved Oxyger				Other:	Hor: 60 4-52			
Total Volume	Rate of	Time	Temp	pН	Specific*	Turbidity	Clarity, Oc	lor, PID Readings,
Discharged	Discharge				Conductance	or D.O.	Other:	9.7
	3 GPM	12:37	28,77	7.89	7,65	200	Leidus	tbrown,
	3 GPM	12:39		7.58	2.77	120	SWF	wous odor
	3 GPM	12:41	35,72	7.38	2.79	31.4		- VO COUL
	3 GPM	12:43	25.41	7.31	9.80	6,7		
	3GPM	12:45	25.18	7.28	2.81	2,6	1	
								· · · · · · · · · · · · · · · · · · ·

Specific Conductance readings temperature compensated to 25°C, if not, report temperatures at which reading obtained.

SHEET ! OF !

															3115	EI OF
SITE:		<u>_</u> e	PG Sit	<u>site</u>	016					TING FIRM:					•	
DATE:			8-5	-Zau					FIELD PE	ERSONNEL:	Jim	Mikach	rsk	•		
WEATHE	R		Sung	طيار	70's, ned, hundity											•
MONITOR	R WE	SCREENED/OPE											INTERVAL:	7.35 -	- 16.35	'TIC
WELL PE	RMI	Г#:			WELL	DIAMETER:		Inches								
PID/FID R	EAD	ING	S (ppm):		JND: DUTER CAP: INNER CAP:			DEPTH		PTH: <u> .\$C</u> BEFORE PU PUMP:	JMP INSTAL			low TIC	-	
	PURGING	SAMPLING	•	H ınits)	1	CIFIC CTIVITY	REC POTEI	•	DISSO		TURB	IDITY (U)		RATURE ees C)	PUMPING RATE	DEPTH TO WATER
TIME	PUR	SAM	· · · · · · ·	CHANGE*	READING		READING	-	READING		READING		READING	I	(ml/min)	(ft below TOC)
1145	X			NA		NA		NA	·	NA		NA .		NA		5.10
1157	X		7.14	0.00	9,44	0.000	-131	0.000	1.07	0.00	0.0	0.00	42.15	0.00	202	5.15
1220	*		7.05	0.00	2.59	0.000	-125	0.000	0.29	0.00	0.0	0.00	21.08	0.00	200	5-15
1225	Χ		7.03	0.00	2.59	0.000	-128	- 0.000	0.29	0.00	0.0	0.00	20.90	0.00	a00 :	5.15
1230	X		7.01	0.00	2.63	0.000	-130	0.000	0, 25	0.00	0.0	0.00	20.85	0.00	200	5.17
1235	Υ		6.98	0.00	2.45	0.000	-13)	0.000	6、24	0.00	0.0	0.00	20.80	0.00	200	5.17
1240	X		7.00	0.00	2.05	0.000	-130	0.000	0.77	0.00	0. O	0.00	2082	0.00	200	5.17
1245	*		7.01	0.00	2:66	0.000	-135	0.000	0.21	0.00	0.0	0.00	20.86	0.00	200	5.17
1250	X		7.00	0.00	2.66	0.000	-137	0.000	c. 21	0.00	0.0	0.00	20.85	0.00	200	\$.17
1255	X		6.99	0.00	2.65	0.000	-136	0.000	0,19	0.00	0.0	0.00	20.84	0.00	20c	5.17
1300		X	7.00	0.00	2.66	0.000	-140	0.000	0.19	0.00	0.0	0.00	20,84	0.00		:
COMMEN	TS:			· •			e who e	• .								
MAKE/MC	DEL	. OF	WQ METER	:	14	SERIAL #:							<u>.</u>			

SHEET | OF |

		•					w	*			<u></u>					
SITE:				PG Site	016				CONSUL.	TING FIRM:	Tetra Tech					
DATE:			STEN .	8/5/11			·/		FIELD PE	RSONNEL:	Franci	s R.				
WEATHE	R		Sunny	ingh lo	w sos,	mod hui	ndry_				•					
ŀ			PPG4-	MWIS	•		9.37'	TIC CI	0,692)		SCREE	NED/OPEN	INTERVAL:	2.5	010 6	gs
WELL PE	ELL PERMIT #: WELL DIAMETER: Inches										2					
PID/FID R	DENEATH OUTED CAR. 0.0								INTAKE DEF TO WATER MODEL OF F	BELODE DI	IMD INSTAL	LATION . 1	.55_ ft be AL #:	low TIC	·	
SPECIFIC REDOX CONDUCTIVITY POTENTI (pH units) (mS/cm) (mv) TIME 2 READING CHANGE* READING CHANGE* READING CH											TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE	DEPTH TO WATER
TIME	Ž.	SAMI	READING			CHANGE*	READING		(m READING	g/I) CHANGE*	READING	CHANGE*		CHANGE*	(ml/min)	(ft below TOC)
943	<u>-</u>	0,		NA	Terry Land	NA		NA.		NA		NÃ		NA	120	1.91
1030	X		6.83	0.00	1.03	0.000	-158	0.000	0.29	0.00	0.0	0.00	20.57	0.00	120	1.91
1035	X		6.82	0.00	1,05	0.000	-155	0.000	0,30	0.00	0.0	0.00	28.59	0.00	120	1.91
1040	X		6.82	0.00	1.06	0.000	-155	0.000	G, 28	0.00	0.0	0.00	26.61	0.00	120	1.81
1045	X		6,82	0.00	1,09	0.000	-156	0.000	0,27	0.00	0.0	0.00	28.62	0.00	120	1.91
1050		×	6.81	0.00	1,16	0.000	-156	0.000	0.29	0.00	0.0	0.00	28.65	0.00	120	1.91
				0.00	-	0.000		0.000		0.00		0.00		0.00		
				0.00		0.000		0.000		0.00	·	0.00		0.00		
				0.00		0.000		0.000		0.00		0.00		0.00		
				0.00		0.000	·	0.000		0.00		0.00		0.00		
				0.00		0.000		0.000		0.00		0.00		0.00		
COMMEN	COMMENTS:									٤.	·					
MAKE/MO	MAKE/MODEL OF WQ METER: SERIAL #:															

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

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SITE:	•	Ъ	PG Sit	. 016				· · · · · · · · · · · · · · · · · · ·	CONSUL	TING FIRM:	Tetra Tech	<u> </u>				1
DATE:	•		8-5-11							ERSONNEL:					•	
WEATHE	R			J. 80's,	moderate	humidit	ን				3,000	4.1			•	
			PPG4	- MW16	Wi	ELL DEPTH:	3 . (ILIS' TIC	12,693	· ·	SCREI	NED/OPEN	INTERVAL:	3.65-1 4.5 -	1.15 6	TIC
WELL PE	RMIT	Т#:		:	WELL	DIAMETER:	<u>a</u>	Inches						4.5 _	13, 642	
PID/FID R	EAD	ING	S (ppm):		JND: DUTER CAP: NNER CAP:			PUMP DEPTH MAKE/I	NTAKE DEI TO WATER MODEL OF I	PTH: 7.50 BEFORE PUPP: QE	ft below T JMP INSTAL D May	IC LATION : 2 Mae SERIA	2.70 ft be	low TIC		
		(2)	l		SPEC	CIFIC	RFI			DLVED	· ·		<u> </u>			
	SPECIFIC REDOX									GEN	TURE	IDITY	TEMPERATURE		PUMPING	DEPTH TO
;	(mS/cm) (mv)						g/l)	(N.	TU)	(degrees C)		RATE (ml/min)	WATER (ft below TOC)			
TIME	颪	S.	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	((
12:13				NA	,	NA		NA		NA		NA		NA		3:71
12:15#				0.00		0.000		0.000		0.00		0.00		0.00		3,70
18:35			7.15	0.00	0.906	0.000	-107	0.000	0.77	0.00	0.9	0.00	24.26	0.00	100	3,80
18:40			7.13	0.00	0.917	0.000	-111	0.000	0.43	0.00	03	0.00	28.00	0.00	100	3.81
13:45			7.09	0.00	0.919	0.000	-121	0.000	0,44	0.00	0.0	0.00	36.70	0.00	loo	3.87
13:50			7,0%	0.00	0.929	0.000	-127	0.000	0.36	0.00	0.0	0.00	a6.23	0.00	100	3. 8 3
laiss			7.09	0.00	0.942	0.000	-131	0.000	0.31	0.00	0.0	0.00	26.25	0.00	166	³ , 2,3
13:00			7.08	0.00	0.453	0.000	-133	0.000	0.29	0.00	0.0	0.00	25.87	0.00	100	3.83
13:05			7.08	0.00	0.963	0.000	-135	0.000	0.27	0.00	0.0	0.00	25.55	0.00	100	3.83
13:10			Sompl	9 0.00		0.000		0.000		0.00		0.00		0.00	*.	
				0.00		0.000		0.000		0.00		0.00		0.00		
COMMEN	TS:	A	f @ Ow	+ of CO2	-repla	ad & re	sumed b	ndud 6	, 12132							
MAKE/MO	MAKE/MODEL OF WQ METER: SERIAL #:															

	_	1
SHEET	40	F

															0112	<u> </u>
SITE:			Dt	OG Sofe	016				CONSUL	TING FIRM:	Tetra Tech	l				
DATE:		_	9-16-	·A					FIELD PI	ERSONNEL:	Jim	۸,			_	
WEATHER	?		Sw	my 160's									'			
MONITOR	WE	ELL	016_ r	WOI	WI	ELL DEPTH:	4.5° T	IC			SCREI	NED/OPEN	INTERVAL:	4,5-	9.57 B	cos tic
WELL PER	RMI	T #:			WELL	DIAMETER:	2	Inches		ষ)					
PID/FID R	BENEATH OUTER CAP: DEPTHENDED MAKE								TO WATED	PTH: 2007 BEFORE PU PUMP: Q	IMD INCTAI	IC LATION : 3 LISTION : 3	. <u>52</u> ft be AL #:	low TIC	_	:
	PURGING	SAMPLING		Н	CONDU	CIFIC CTIVITY	POTE		ОХҮ	OLVED GEN	l	IDITY		RATURE	PUMPING RATE	DEPTH TO WATER
TIME	Z	AMI	(pH t	inits) CHANGE*		/cm)	 	iv)		g/l)	`	ru)		ees C)	(ml/min)	(ft below TOC)
1357	<u> </u>	S	READING	NA NA	READING	CHANGE*	READING	CHANGE*	READING	NA NA	READING	CHANGE*	READING	CHANGE*	150	3.47
			6.94	0.00	1.45	0.000			11.00-0		10 •		2200			
1400		+1	0.74	0.00	1.75	0.000	-51	0.000	4.32	0.00	19.1	0.00	22.29	0.00	150	3,50
1405			692	0.00	1,98	0.000	-53	0.000	2.53	0.00	9.5	0.00	2156	0.00	225	3.54
1410			6.89	0.00	1.97	0.000	-47	0.000	1.62	0.00	3.3	0.00	21.36	0.00	286	3.54
1418			6.89	0.00	1.95	0.000	45	0.000	1.56	0.00	23	0.00	21,24	0.00	<i>38</i> 5	3.53
1486			6.87	0.00	1.95	0.000	-46	0.000	*	0.00	a.1	0.00	ରା.ଅ୭	0.00	225	3.53
1485			6.87	0.00	1.96	0.000	-50	0.000	0.91	0.00	1.2	0.00	21.17	0.00	325	3,53
1430			6.97	0.00	1.96	0.000	-54	0.000	0.75	0.00	Q.9	0.00	ઢા. 1મ	0.00	225	3.53
। मम्बे			681	0.00	1.96	0.000	-56	0.000	O.7a	0.00	0.6	0.00	21.12	0.00	225	3.53
141190			6.87	0.00	1.46	0.000	-57	0.000	Q .68	0.00	0.5	0.00	2.07	0.00	225	3.53
INSE			Som	16300		0.000		0.000		0.00		0.00		0.00		
COMMENT	rs:		Purge i	nules clea	e, sting s	idfurous o	gor									
			# Rive	tuoding wl	bride ch	ste, took	lower read	~ 0								į
MAKE/MO	KE/MODEL OF WQ METER: Hories U-52 SERIAL#:											·				
									· · · · · · · · · · · · · · · · · · ·							

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SHEET	1	OF	- 1

			9/11 Sunn	y wav		jh Lo				TING FIRM		Tt F. Rougu	110	· · · · · · · · · · · · · · · · · · ·		
WELL PE	:PM	IT #	#: <u>616</u>		18763	LL DEPTH LL DIAME	: 10' 6 TER:	inche					INTERVAL:	4.5.	1695	
PID/FID					UND: OUTER CA INNER CAI	P:		DE		ATER BEF	ORE PUMP		TEC (~7.5' NES (~7.5' NTION: 3.4		w foc Ti	C
	SPECIFIC REDOX ON DUCTIVITY POTENTIAL ON (pH units) (mS/cm) (mv)		NTIAL nv)	DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		1	RATURE eos C)	PUMPING RATE	DEPTH TO WATER					
1357	<u>~</u> ×		READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE.	1	(ft below TOC)
409	×		7,23		2,36		-228		9.64		247		21.03		200	3.42
1407	×		7.22		2,35		-262		8.98		116		2066			3.42
1412	X		7.22		2.38		- 280		8.19		25,3		20,58			3.42
1417	7		بر 7		2.41		-783		769		13.9		20,50			3.42
1422	X		7.22		2.41	~~~	-286		7.16		7.2		26.44			3.42
1437	×		7.22		2.42		- 788		6.10		2.1		20.46			3.42
H3 3	X		7.22		2.42		-290		5.97		4,4		20.44	***************************************		3,42
1437	>		7.20		2.42		-291		5.56		3.6		20.41			3.42
1442	>		7.22		2.42		-294		4.96		2.1		20.40			3.4≥
1447	1/_		7, 22		2.43		-296		4,59		2.2		20.39			Š, √2
COMMEN 1451	TS:		7.22		2.43		-297		4.47		2.3		26,35	<u> </u>		3.4≥
1457	-	X	7.22		2.43	·	299		4.21		2.2		20.33			3.42

^{*}INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ±0.1 for pH; ±3% for Specific Conductivity and Temperature; ±10 mv for Redox Potential; and ±10% for Dissolved Oxygen and Turbidity.

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SITE:			9=1	su pp	5 Site	<u>016</u>					Tetra Tech					
DATE:				4 • * * * * * * * * * * * * * * * * * *					FIELD PE	RSONNEL:	I'm !	۸				
WEATHER	t		clowly,	rain,	high hun	. Ligh 6	,c`a									
MONITOR			016-			ELL DEPTH:		Lc			SCREE	NED/OPEN	INTERVAL:	4,5'-	9.5° TI	c
WELL PER	IMS	Т#:			WELL	DIAMETER:	<u> </u>	Inches								
PID/FID RI	READINGS (ppm): BACKGROUND: PUMI									тн: 7.0	_ft below T	ic				
									TO WATER					low TIC		
									DISSOLVED							
	SPECIFIC REDOX POTENTIAL (pH units) (mS/cm) (mv) TIME OF READING CHANGE* READING CHANGE* READING CHANGE								OXY		TURBIDITY		TEMPERATURE		PUMPING	DEPTH TO
	PURGING	MP	(pH u	ınits)	(mS	/cm)	(m	ıv)	(ḿ		(N)		(degr	es C)	RATE (ml/min)	WATER (ft below TOC)
TIME	PL	S	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1600				NA		NA		NA		NA		NA		NA	300	3,33
1610			8 .54	0.00	2.75	0.000	-249	0.000	261	0.00	148	0.00	2090	0.00	300	3,33
1615			8.33	0.00	2,86	0.000	2+14	0.000	0.35	0.00	28.6	0.00	2067	0.00	300	3,33
1620			8.34	0.00	2,83	0.000	-245	0.000	0.31	0.00	12.4	0.00	30.60	0.00	300	3.33
1625			8,36	0.00	239	0.000	-246	0.000	0.38	0.00	11.9	0.00	2960	0.00	300	3,33
1630			8,37	0.00	2,89	0.000	-a46	0.000	0.26	0.00	9,1	0.00	20.59	0.00	300	3,33
1635			837	0.00	2.90	0.000	-246	0.000	0.34	0.00	2.7	0.00	20.56	0.00	300	3,3 3
1640			8.36	0.00	291	0.000	-245	0.000	0,23	0.00	8.1	0.00	20.56	0.00	300	3,33
1645		,	Sar	1p le30		0.000		0.000		0.00		0.00		0.00		-
				0.00		0.000		0.000		0.00		0.00	i	0.00		
0.00 0.000 0.000										0.00		0.00		0.00		
COMMENT	rs:		Punje u Samp	utor to	upay) Suc	y-bown	, strong	sulfund	adar							-
			Samp	ाहरू वर्ग 16	45	•	_		•			·				
MAKE/MO	KE/MODEL OF WQ METER: SERIAL #:															

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SHEET	*	OF		

SITE: DATE:		PPG - Site 616 "115/" R: humal, partly sunny								TING FIRM	1	1	1			
WEATHE						<u> </u>			FIELD PI	ERSONNEL	- <u>- </u>	Ronquil	[6			
WELL PE	RM	IY #	#: <u>O</u> lle		18782	LL DEPTH LL DIAME	: <u>10' -</u> TER:	T <u>LC</u> inche	5		SCREE	NED/OPEN	INTERVAL:	5-10'-	TIC	
PIO/FID F				BENEATH	UND: OUTER CA INNER CAI			DE	PTH TO W		DRE PUMP		TOS TIC NTION: <u>3.8</u>	3 ft belo	w fec T	rć
******	SPECIFIC REDOX ON DUCTIVITY POTENT (pH units) (mS/cm) (mv) E							NTIAL nv)	(mg/l) (NTU)			TEMPERATURE (degrees C)		PUMPIN RATE	DEPTH G TO WATER	
TIME [43]	- L	S	READING	CHANGE,	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING		READING	CHANGE.	(mi/min	(ft below TOC)
	1			•••	0				A-0	I TRAM		NA		NA	ౘంం	383
1437	K		7.00		2.66		-167		9.58		12.7		21.17	***************************************		3.90
1441	×		7.00		2.64		-172		8.86		6,0		20,70			3.90
1447	>		7,00		2.61		-17-4		7.77		2.9		20.41	· · · · · · · · · · · · · · · · · · ·		3.91
1451	×		7.00	***	A.60		-176		7.06		1.9		20,33			3.91
1457	7		6.99	7/81/14/14 No. 14 No.	2.58	·	-178		6.00		1,2		20.33			3.93
1501	×		4.99		2.58	*****	-179		5.56		1, 3		20.20			3.93
1507	ን		6.99		257		-180		5.03		1, 1		20.18			3.95
1511	7		6.99		2.57		-180		4.73		1.0	·	20, 20			3.95
1517	×		6.99	name and a state of the state o	2,57		-181		4.63	1777	٥, g		20.20			3.96
1521	×	THE STATE OF	6.99]	2.57		-181		4.59		0,8		26,19	***************************************		3,96
COMMEN 1527		×	છ. ૧૧		2,57		-181		4.53	······································	0.8		26,17	I		3.96
				····		····					······································					

^{*}INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ±0.1 for pH; ±3% for Specific Conductivity and Temperature; ±10 mv for Redox Potential; and ±10% for Dissolved Oxygen and Turbidity.

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SITE: DATE:			7/15/11			7.70	W17333344444444	71		TING FIRM	***	TT	116			
	RW	ÆLL			-MMOME	LL DEPTH	: 10'	TIC	PIELDF	ERSONNEL		Rengul				***************************************
WELL PE	RM	tit d	·		1875		TER: 🚨	inche		·			INTERVAL:	5-10	ITC	
10/110	(E.	10114			UND; OUTER CA INNER CAI	P:		DE	JMP INTAK PTH TO W. AKE/MODEI	ATER BEF	ORE PUMP		TOCTIC	ø∂ ft bold	w tes TI	:C
	PURGING	SAMPLING	(рН	pH units)	CONDU (mS	CIFIC CTIVITY (/cm)	POTE	DOX NTIAL nv)	OXY	OLVED YGEN 19/1)	1	SIDITY TU)	i	RATURE Pes C)	PUMPING RATE	DEPTH TO WATER
TIME		1	READING	CHANGE	READING	CHANGE.	READING		READING	CHANGE*	READING	CHANGE.	READING	CHANGE.	(mi/min)	(ft below TOC)
1554	×	ļ		NA	·	NA		- NA		NA		NA		NA		2.62
1229	X	ļ	7.29		2.07	****	-164		2.73		974		21,36			3.7c
1603	×		7.28		241.88		-171		81.44		274		21.30			३ ७०
1608	×		7,26		1.69		-169		1.04		66.0	·	21.26			3.71
1603	×		7.25	**************************************	165		-170		0.83		384	·	21.26			3.74
1648	×		7.25		ادوا, ا	~~~~~	-172		0.66		25.3		21.24			3,75
1623	×	,	7.35		1,63		-173		0,56		#17.4		21.26			3.75
1628	×		7.27		1.62	······································	-17-4		0.54		16.9		21,24			3.47
1633	¥		7.25		1.62		-174		0.51		15.7		ગા.ગઢ			3 .79
1638		7	7.24	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,60	~~~	-177		૦,4૧		15.3		21.21	A1/A		3.80
COMMEN	TS:		-													
																and the state of t

^{*}INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ±0.1 for pH; ±3% for Specific Conductivity and Temperature; ±10 mv for Redox Potential; and ±10% for Dissolved Oxygen and Turbidity.

SHEET OF	

SITE: DATE:	-		9/15				***************************************			TING FIRM		**************************************		<u> </u>		
	_	-	cloudy						FIELD P	ERSONNEL		,	Francis			
WELL PE	RM	IT #	#: <u>G</u> UL		1875		: <u>9/ 1</u> TER: <u>2/</u>		· et		SCREE	NED/OPEN	INTERVAL:_	4-9'	TIC	
PID/FID I				BENEATH BENEATH	UND: OUTER CA INNER CAI	P:	W	PU DE	IMP INTAK PTH TO W		ن ک ک ORE PUMP	ft below	TOON:		***************************************	
	URGING	AMPLING	(pH READING	oH units)	SPE CONDU (mS	CIFIC CTIVITY i/cm)	POTE (n	DOX INTIAL nv)	OXY (m	OLVED (GEN (g/l)	(N	SIPITY TU)	TEMPEI (degre		PUMPING RATE	DEPTH TO WATER
1153	7	S	READING	CHANGE, NA	READING	CHANGE*	READING	CHANGE.	READING	CHANGE*	READING	CHANGE*	READING	CHANGE.	 	(ft below TOC)
1158	X		7.89		2.20	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-205		2.91		284		22.11		300	à.10
1203	X		7.90		2.27		-248		1.47		90.7		21.64			2,16
1908	χ		7.89		2.27		-254		1.15		3-1.6		21.46	·		2.10
1213	γ		7.88	***************************************	2.27		-258		૦.૧૨		13.4		21.35			2.15
1218	¥		7.88	~~~~~	2.26		-260		0.69		9.8		21.34			2.16
1223	X		7.88		2.27		-262		6.59		6.4		21.35			2.18
1998	X		7.91		م.2.		-263		0.71		5.7		21, 33			2.20
1233	¥		7.88	·····	2.36		-266		0.69		5.4		21.32			2.21
1233		*	7.87		2.26	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-267		0.67		5.1		21,30			2.26
COMMEN	TS;]					and Parish Agents	SEE ANDERSON						

^{*}INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ±0.1 for pH; ±3% for Specific Conductivity and Temperature; ±10 mv for Redox Potential; and ±10% for Dissolved Oxygen and Turbidity.

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SHEET	1	OF	ι	

SITE:			PPG 5	ate or b	•				CONSUL	TING FIRM:	Tetra Tech					
DATE:			9/14		<u></u>			•				1 Fronc	N D		•	
WEATHE	R	-		ondy, l	reda bols	brah h	ważdaka	-		,		11 1000	3,5			
								•						4-9	<u> </u>	
MONITOR				MWOT	-	ELL DEPTH:					SCRE	ENED/OPEN	INTERVAL:	4-4		
WELL PE	KMI	I #:			WELL	DIAMETER:	<u>a</u>	Inches								
PID/FID R	EAD	ING	iS (ppm):		JND: DUTER CAP INNER CAP:			DEPTH		BEFORE PU	JMP INSTAL	IC LATION : 4 SERIA		low TIC	_	
		U			SPE	CIFIC	REI	DOX	DISSO	LVED						
	PURGING	SAMPLING	ii -	н		CTIVITY		NTIAL	1	GEN	1	IDITY		RATURE	PUMPING RATE	DEPTH TO WATER
TIME	URG	AMF		units)	· · · · · · · · · · · · · · · · · · ·	/cm)	· - · · ·	iv)		g/l)		TU)		ees C)	(ml/min)	(ft below TOC)
	4	S	READING	CHANGE*	READING		READING	CHANGE*	READING		READING	CHANGE*	READING	CHANGE*	700	205
1039	X			NA		NA		NA		NA		NA		NA	300	3.05
1043	X		7.56	0.00	2.94	0.000	-156	0.000	3.99	0.00	256	0.00	22.87	0.00		3.07
1052	Y		7.66	0.00	2.97	0.000	-185	0.000	1,36	0.00	69.2	0.00	22.35	0.00		3.67
1057	×		7,65	0.00	ا ۹ . د	0.000	-168	0.000	4.55	0.00	50.0	0.00	22.39	0.00		3.67
no	Y		7.45	0.00	વ . મ	0.000	-181	0.000	1,32	0.00	33. F	0.00	22.06	0.00		3.07
1107	γ		7,65	0.00	2.95	0.000	-190	0.000	0.77	0.00	22.4	0.00	翌.96	0.00		3.08
1112	*		7:65	0.00	2.91	0.000	-193	0.000	0.67	0.00	14,3	0.00	21.74	0.00		3.08
1117	Y		7.66	0.00	2.89	0.000	-196	0.000	0.64	0.00	13.8	0.00	21.93	0.00		3,10
1122		*	7.66	0.00	2.86	0.000	-197	0.000	0.62	0.00	13.5	0.00	21.92	0.00		3.10
				0.00		0.000		0.000		0.00	···	0.00		0.00		
٠,				0.00		0.000		0.000		0.00		0.00		0.00		
COMMEN	TS:															
								<u> </u>								
MAKE/MC	DEL	. OF	WQ METER	Hoube	4-52	SERIAL #:										

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

SHEET | OF 1

															JNE	<u> </u>
SITE:			PPG	Site	016				CONSUL	TING FIRM:	Tetra Tech	ı			_	
DATE:			9/15						FIELD PI	ERSONNEL:	Jim	4.			_	
WEATHER	2		-styclov	کم , اود	JTC's,	mounte	huandet.)								
MONITOR	WE			1WO8			% 8,				SCREI	NED/OPEN	INTERVAL:	3.5-8.	5 AWAY	TIC
WELL PEI	RMI	Г#:			WELL	DIAMETER:	25-2	Inches							a	
PID/FID R	EAD	ING	S (ppm):		JND: DUTER CAP INNER CAP:			DEPTH	TO WATER	PTH: <u>60</u> BEFORE PU PUMP: <u>GE</u>	_ JMP INSTAL	LATION:	2.67 ft be AL #:	low TIC	_	
	PURGING	SAMPLING	p (pH t	H ınits)	CONDU	CIFIC CTIVITY /cm)	POTE	DOX NTIAL IV)	охү	OLVED 'GEN ['] g/l)		IDITY FU)	1	RATURE ees C)	PUMPING RATE	DEPTH TO WATER
TIME	2	SAI	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	(ft below TOC)
1050				NA		NA		NA		NA		NA		NA	300	261
1057			7.43	0.00	2.06	0.000	-122	0.000	3.95	0.00	46.0	0.00	2474	0.00	30 0	3.62
2011			7.43	0.00	1.97	0.000	-135	0.000	1.99	0.00	8.1	0.00	24.45	0.00	300	262
1110),44	0.00	1.97	0.000	-136	0.000	1.60	0.00	4.2	0.00	24,48	0.00	300	2.62
1115			7,43	0.00	1.99	0.000	-137	0.000	1,30	0.00	3.1	0.00	2446	0.00	300	2.62
1120			7.43	0.00	1,99	0.000	-139	.0.000	1,11	0.00	2.3	0.00	24,35	0.00	300	2,62
1135			7.43	0.00	202	0.000	-139	0.000	0.92	0.00	1.6	0.00	2431	0.00	300	262
1130			7.43	0.00	203	0.000	-139	0.000	0.80	0.00	1.2	0.00	24.34	0.00	300	2.62
1195			7.43	0.00	2.04	0.000	-140	0.000	Q73	0.00	1.0	0.00	3434	0.00	300	262
lap			7.43	0.00	2.05	0.000	-141	0.000	0.63	0.00	0.8	0.00	24,34	0.00	300	362
HIGH		X		0.00		0.000		0.000		0.00		0.00		0.00		
MAKE/MO		. OF	SOMP WO METER		N45		0124 Mar Cl		ing sold	fur ons	ad or					
				• 70												

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				······		*										
SITE:			PPG	Sate O16	.			•	CONSUL	TING FIRM:	Tetra Tech	l				
DATE:			9-15-1					_	FIELD PI	ERSONNEL:		M			_	
WEATHER	R		Clanky	law To	's, high	Homen	٦	-				•			•	
MONITOR	WE	ELL	PPGH	-MWO2	, wi	ELL DEPTH:	16.35	TIC			SCREI	NED/OPEN	INTERVAL:	7, 35-	16.35	TIC
WELL PER	RMI	T #:			WELL	DIAMETER:	<u> </u>	Inches			14.10					
PID/FID RI	EAD	ING	S (ppm):		JND: OUTER CAP NNER CAP:			DEPTH	INTAKE DEI I TO WATER MODEL OF I	BEFORE PI	t below T	IC	5. 59 ft be AL #:	low TIC	_	
	PURGING	SAMPLING	p (pH t	H ınits)	CONDU	CIFIC CTIVITY /cm)	POTE	DOX NTIAL 1V)	ОХҮ	OLVED GEN g/l)	'	IDITY FU)		RATURE ees C)	PUMPING RATE	DEPTH TO WATER
TIME	2	SAI	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		CHANGE*	READING	CHANGE*	READING		(ml/min)	(ft below TOC)
lais				NA		NA		NA		NA		NA		NA	250	5.54
1229			7.13	0.00	2.29	0.000	~176	0.000	2.74	0.00	4.0	0.00	21,63	0.00	250	5.66
1725	İ		7.08	0.00	1,49	0.000	-185	0.000	2.90	0.00	3.0	0.00	20.64	0.00	25Q	5.64
1230			707	0.00	1,48	0.000	-185	0.000	१.49	0.00	3,3	0.00	19.27	0.00	25e	5.64
1235			7.07	0.00	1.50	0.000	-191	0.000	1,06	0.00	1.7	0.00	19.31	0.00	35Q	5,64
1240			7.07	0.00	1.52	0.000	-145	0.000	0.89	0.00	1.2	0.00	19.29	0.00	250	5,64
1245			7.07	0.00	1,53	0.000	-201	0.000	0,70	0.00	1.0	0.00	19,29	0.00	250	5.64
1250			7.09	0.00	1.54	0.000	-206	0.000	0,59	0.00	0,3	0.00	1936	0.00	950	5.64
1355	_		7.09	0.00	1.56	0.000	-911	0.000	0,49	0.00	0.3	0.00	1937	0.00	250	5.64
1300			7.08	0.00	1.57	0.000	-215	0.000	O.HS	0.00	0.1	0.00	1935	0.00	350	5.64
1305			7.09	0.00	157	0.000	-219	0.000	0.4	0.00	03	0.00	1932	0.00	750	5.64
COMMENT						SINGH	sulfun	ns ador							8	
mARL/MU	DEL OF WO METER: Honfo 4-52 SERIAL #:															

SHEET OF

SITE:			9PG -	Site 61	1.					***********	······································		***************************************	······································	JIICE 1	UF
DATE:			9/15/	1			~114114		CONSUL	TING FIRM	l:	7}				
WEATHE	R:	••••••	railh b	um i et					FIELD P	ERSONNEL	**	F. Rongi	ille			
WELL PE	₽M	HT #	#: <u>7</u> 764		1975		: 9.37 TER: 3	inche			SCREE	NED/OPEN	INTERVAL:_	2.51%	10 6gs	
PID/FID				BENEATH	OUND: OUTER CA INNER CA			DE	PTH TO W	E DEPTH: ATER BEFO L OF PUMP	DRE PUMP		FOCTIC	ft belo	w TOC	
TIME	URGING	SAMPLING	(pH	oH units)	CONDU (ms	CIFIC CTIVITY 5/cm)	POTE (r	DOX NTIAL nv)	OX) (m	OLVED (GEN 19/I)	1	SIDITY TU)	TEMPE! (degre		PUMPING RATE	DEPTH TO WATER
1316	1		READING	CHANGE'	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	}	READING	CHANGE*	(ml/min)	(ft below TOC)
	×	1	- 5					NA.		NA		NA		NA	300	1,32
1321	,×		7.31		1.23	<u> </u>	-219		1.29		7.5		24,85	***************************************		2.10
1326	X		7.22		1.26		-219		0.66		3.9		25.06		***	2.10
1831	×		7.32		1.27		7219		063		3.8		25.04			2.10
1336	λ		7,21		1,33		-202		0.54		3.6		24.98			2.12
1341	X		7.30		1.42	~~~	المدد-		0.46		2.7		24.95			2.15
1344	X		7.17		1.54		-223		0,43		2.2		24, 93			2.18
1351	X		7.16		1,57		-223		0.37		1.16		24.92			2.20
1354	γ		7.14		1,65		-222		0,37		1,2		24.97			2,25
1301	X		7.15		1.67		- 223		0,30		1,0		24.99			2.27
1406		. / 1	7.14		1.69		- 22.J		७.३०		0.8		24.98	***************************************		2.30
COMMEN	TS:		***************************************					***************************************								

^{*}INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ±0.1 for pH; ±3% for Specific Conductivity and Temperature; ±10 mv for Redox Potential; and ±10% for Dissolved Oxygen and Turbidity.

SHEET I OF O

SITE:			PPG SH	e 016							Tetra Tech					
DATE:			9-15-1	\					FIELD PI	ERSONNEL:	7:0	<u> </u>			_	
WEATHER	₹		Cleady	, 70's	- desper	homisty	-	•								
MONITOR	WE	ELL	PPGM-	MU16	228 WI	ELL DEPTH:	1115	TIC			SCREI	ENED/OPEN	INTERVAL:	3.65	-11, 15'7	IC
WELL PER	RMI.	Т#:			WELL	DIAMETER:	<u>a</u>	Inches							12,692	
PID/FID R	EAD	DING	S (ppm):		JND: DUTER CAP INNER CAP:			DEPTH	INTAKE DEI TO WATER MODEL OF I	BEFORE PI	IMP INSTAL	LATION - 3	.0ス_ ft be AL #:	low TIC	-	
	PURGING	SAMPLING		Н	CONDU		POTE	OOX NTIAL	DISSO OXY	OLVED GEN	TURE	BIDITY	TEMPE		PUMPING RATE	DEPTH TO WATER
TIME	ÜRC	AM		units) CHANGE*	(mS READING		<u> </u>	iv)	(m			TU)		es C)	(ml/min)	(ft below TOC)
1345	<u>D.</u>	S	KEADING	NA	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	2300	∂.18
1350	-		691	0.00	2,33	0.000	-143	0.000	3.09	0.00	& 5	0.00	20.72	0.00	250	Ø) 3,75
1355		·	6,94	0.00	204	0.000	-152	0.000	203	0.00	14.5	0.00	21.00	0.00	200	3.22
1400			7.01	0.00	1.57	0.000	-146	0.000	1.54	0.00	13,4	0.00	2143	0.00	200	3.22
1405			7.11	0.00	1,04	0.000	-134	0.000	1,39	0.00	10.0	0.00	24.46	0.00	200	3.23
1410			7.18	0.00	0,792	0.000	-132	0.000	1,25	0.00	5.2	0.00	21,54	0.00	200	3.23
1415			7.22	0.00	0,759	0.000	-135	0.000	1.02	0.00	3.0	0.00	a1.57	0.00	20a	3,23
1420			7.72	0.00	0.806	0.000	-139	0.000	0.87	0.00	1.3	0.00	21,47	0.00	200	3.24
1425			7.23	0.00	0.910	0.000	-143	0.000	071	0.00	1.1	0.00	21.41	0.00	200	324
1430			7,23	0.00	1,00	0.000	-147	0.000	0.61	0.00	0,3	0.00	21.43	0.00	290	3,24
1435			7,24	0.00	1,13	0.000	-152	0.000	0,50	0.00	مه	0.00	ી .મમ	0.00	300	3,24
COMMENT					v , sligh		ras abor		[.							
				- CLOVI GE	ヘレーシス	JEINIME #										

SHEET A OF 3

															эпс	EI UF
SITE:				Site 016						TING FIRM:				,	•	
DATE:			9-15-1			<u></u>			FIELD P	ERSONNEL:	_ Zm	M				
WEATHE	R	_	Clandy.	righ 60's	لهما لمسر	n humid	.tg									
MONITOR	R WE	ELL	PPG4.	MW 16	W	LL DEPTH:	(1,15° T.	IC			SCREI	NED/OPEN	INTERVAL:	3.65'-1	いら てエく	
					-			Inches	٠					બ	5'-12'69	Š
PID/FID R	EAI	DING	iS (ppm):		UND: OUTER CAP INNER CAP:			DEPTH	TO WATER	PTH: <u>4,29</u> R BEFORE PI PUMP:	JMP INSTAI	LATION:		low TIC	-	
	PURGING	SAMPLING	ll -	oH units)	CONDU	CIFIC CTIVITY /cm)	POTE	DOX NTIAL IV)	оху	OLVED (GEN 1g/l)	l	SIDITY TU)	1	RATURE ees C)	PUMPING RATE	∝DEPTH TO WATER
TIME	2	SA	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		CHANGE*	(ml/min)	(ft below TOC)
१मम०			7.23	NA	1.19	NA	-156	NA	0.45	NA	م٥	NA	21,49	NA	200	3.24
1445			7.24	0.00	1,26	0.000	-160	0.000	0,39	0.00	0,0	0.00	21.39	0.00	200	324
1450			7.24	0.00	1,32	0.000	-165	0.000	Q,3 H	0.00	0.0	0.00	21.38	0.00	Q00	3,24
1455			7.24	0.00	1,34	0.000	-168	0.000	0.31	0.00	0,0	0.00	21,34	0.00	ටඅය	3.24
1500			7.24	0.00	1.37	0.000	-171	0.000	0.29	0.00	0.0	0.00	21.32	0.00	200	3, 24
1505			7.25	0.00	1,39	0.000	-175	0.000	0.27	0.00	0,0	0.00	31,31	0.00	900	3,24
1510			Somp	0.00 کیا		0.000		0.000		0.00		0.00		0.00		
1515				0.00		0.000		0.000		0.00		0.00		0.00		
·				0.00		0.000		0.000		0.00		0.00		0.00		,
				0.00		0.000		0.000		0.00		0.00		0.00		
				0.00		0.000		0.000		0.00	<u> </u>	0.00		0.00		
COMMEN	TS:		\$	comple)	@ 1510			-							•	
MAKE/MO	DEL	L OF	WQ METER			SERIAL #:										

Well Permit Number **E201110441**

MONITORING WELL RECORD

PROPERTY	OWNER: _I	K. I. D. REAL	ту со				
Company/Org	ganization: <u>K</u>	.I.D. Realty Co)				,
Address: 49	31 Fisher Islan	nd Dr Miami, I	Florida 33109				
WELL LOC	ATION: Sit	e 016					· · · · · · · · · · · · · · · · · · ·
Address: 45	Linden Ave						
County: Hu	dson	_ Municipality	y: Jersey City		Lot: 4.L	Block: 15	507
Easting (X):	607062	Northing	(Y): <u>676295</u>		DATE WELL ST	ARTED: August 22,	2011
Coordin	nate System: N	IJ State Plane (NAD83) - USFI	EET DA	ATE WELL COMI	PLETED: August 22,	2011
WELL USE:	MONITOR	ING					
Other Use(s)	•				Local ID: 016	5-MW-01	· · · · · · · · · · · · · · · · · · ·
WELL CON	STRUCTION	J					
Total Depth	Drilled (ft.):_	9.5	Finished We	ll Depth (ft.):	9.5	Well Surface: Flus	h Mount
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		g/Screen # Used s/ch no.)
Borehole	0	9.5	10				
Casing	0	4.5	2		PVC	5	Sch 40
Screen	4.5	9.5	2		PVC	Sch	1 40 .010
	Depth to	Depth to	Outer	Inner	- · · · · · · · · · · · · · · · · · · ·	Material	
	Top (ft.)	Bottom (ft.)	Diameter (in.)	Diameter (in)		Neat Cement (lbs.)	Water (gal.)
Grout Gravel Pack	2.5	9.5	10	2	3	47 Morie #1	4
	hod: Gravity		10		lling Method: Holl		
_			 	Dii	ning Method110h	ow Stelli Augers	
Protective Ca Static Water I Water Level I Well Develop		below land sur Tape 1 hrs.	face	Tot Dri Dri	mp Capacity: _ gpm al Design Head: _ ft Illing Fluid: Il Rig: <u>Geoprobe 66</u> alth and Safety Plan	<u>20</u>	
ATTACHMI	ENTS:						
GEOLOGIC		poreto					
-	OT - Other Con	oncrete, debris					
AUDITIONA	AL INFORMA	AHUN:					

John Brass,

Driller of Record: MONITORING LICENSE # 545089

ENVIRONMENTAL PROBING
INVESTIGATION

Well Permit Number E201110442

MONITORING WELL RECORD

				OILLIO WE	<u>BERECORD</u>		
	OWNER: _F						
Company/Org	ganization: K	.I.D. Realty Co) 				•
Address: 49	931 Fisher Islan	nd Dr Miami, F	Florida 33109				
WELL LOC	ATION: Site	e 016					
Address: 45	5 Linden Ave						
County: Hu	dson	_ Municipality	y: <u>Jersey City</u>		Lot: 4.L	Block: 15	07
Easting (X):	607392	Northing	(Y): <u>676327</u>		DATE WELL ST	ARTED: August 18,	2011
Coordii	nate System: N	J State Plane (NAD83) - USFI	EET DA	ATE WELL COMI	PLETED: August 18,	2011
WELL USE:	: MONITOR	ING					
Other Use(s)):				Local ID: 016	5-MW-02	
WELL CON	STRUCTION	I				÷	
Total Depth	Drilled (ft.):	9.5	Finished We	ell Depth (ft.):	9.5	Well Surface: Flus	h Mount
	Depth to	Depth to	Diameter		Material		g/Screen # Used
Borehole	Top (ft.)	Bottom (ft.) 9.5	(inches)	.		(lb	s/ch no.)
Casing	0	4.5	2		PVC	5	Sch 40
Screen	4.5	9.5	2		PVC		40 .010
	Depth to	Depth to	Outer	Inner		Material	
	Top (ft.)	Bottom (ft.)	Diameter (in.)		Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	2.5	10	2	3	47	4
Gravel Pack	2.5	9.5	10	2		Morie #1	
Grouting Met	thod: Gravity	method		Dri	lling Method: Holl	ow Stem Augers	
	AL INFORMA	<u>ATION</u>					
Protective Ca	sing: <u>No</u> Level: <u>4.2</u> ft. i	halaw land aun	face		np Capacity: _ gpm al Design Head: _ ft		
	Measure Tool:		iace		ai Design Head It lling Fluid:	•	
	oment Period:				ll Rig: Geoprobe 66	<u>20</u>	
	evelopment: <u>St</u>	<u>ıbmersible</u>		Неа	alth and Safety Plan	Submitted? Yes	
Pump Type:							
<u>ATTACHM</u>	ENTS:						
GEOLOGIC			-				
08: Grey C	OT - Other Con		vhires				
8 - 0 5. Tan		is, sand-siit iiii	Attites				
.8 - 9.5: Tan S		TION				-	
	AL INFORMA	ATION:					
		ATION:		· · · · · · · · · · · · · · · · · · ·			
		ATION:					
		ATION:					
		ATION:					
		ATION:					
		ATION:					

John Brass,
Driller of Record: MONITORING LICENSE # 545089

ENVIRONMENTAL PROBING

Company: <u>INVESTIGATION</u>

Well Permit Number E201110443

			MONIT	ORING WE	<u>LL RECORD</u>					
PROPERTY	OWNER: _	K. I. D. REAL	TY CO							
Company/Organization: K.I.D. Realty Co										
Address: 49	31 Fisher Islan	nd Dr Miami, I	lorida 33109							
WELL LOC	ATION: Sit	e 016								
Address: 45										
	dson	Municipality	y: Jersey City		Lot: 4.L	Block: 150)7			

Easting (X): 607576 Northing (Y): 676489 DATE WELL STARTED: August 17, 2011 Coordinate System: NJ State Plane (NAD83) - USFEET DATE WELL COMPLETED: August 17, 2011										
				D.	ATE WELL COM	LETED: August 17, 2	2011			
	: MONITOR				Local ID: 016	: MW 02				
					Local ID: <u>016</u>	WI W -03	 			
WELL CON	STRUCTION	1								
Total Depth	Drilled (ft.):_	9.5	Finished We	ell Depth (ft.):_	9.5	Well Surface: Flush	Mount			
	Depth to	Depth to	Diameter		Material		/Screen # Used			
Borehole	Top (ft.)	9.5	(inches)			(lbs.	/ch no.)			
Casing	0	4.5	2		PVC	Se	ch 40			
Screen	4.5	9.5	2		PVC	Sch	Sch 40 .010			
	Depth to	Depth to	Outer	Inner		Material				
	Top (ft.)	Bottom (ft.)	Diameter (in.)			Neat Cement (lbs.)	Water (gal.)			
Grout Gravel Pack	2.5	9.5	10	$\frac{2}{2}$	3	47 Morie #1	4			
	thod: Gravity		10		lling Method: Holl					
_				Dir	ming Method11011	ow Stem Augers				
Protective Ca	AL INFORMA sing: No	ATION		Pur	mp Capacity: _ gpm					
Static Water l	Level: <u>4.2</u> ft.	below land sur	face	To	tal Design Head: _ ft	•				
	Measure Tool:				illing Fluid:	20				
	oment Period: _ evelopment: <u>St</u>				III Rig: Geoprobe 662 alth and Safety Plan					
Pump Type:	. velopment. <u>50</u>	iomeisioie		TIC	arm and Salety I lan	Submitted: 105				
ATTACHM	ENTS:									
GEOLOGIC	LOG									
1	OT - Other Con									
.8 - 9.5: Brown SM - Silty sands, sand-silt mixtures										
ADDITIONAL INFORMATION:										

ENVIRONMENTAL PROBING Company: INVESTIGATION

John Brass, Driller of Record: MONITORING LICENSE # 545089

Well Permit Number **E201110444**

MONITORING WELL RECORD									
PROPERTY	OWNER: _	K. I. D. REAL	TY CO				·		
Company/Org	ganization: K	.I.D. Realty Co)				····		
Address: 4931 Fisher Island Dr Miami, Florida 33109									
WELL LOC	ATION: Sit	e 016							
Address: 45									
		Municipalit	y: Jersey City		Lot: 4.L	Block: 15	507		
		• • • • •							
l			(Y): <u>676715</u> NAD83) - USFI	FET		TARTED: August 2, 2			
L	· · · · · · · · · · · · · · · · · · ·		1471003) - 0511	D.	ATE WELL COM	IPLETED: August 2, 2	2011		
	MONITOR					LC 14337 0.4			
Other Use(s)	•				Local ID: 0	16-MW-04			
WELL CON	STRUCTION	N .							
Total Depth	Drilled (ft.):_	10	Finished We	ell Depth (ft.):	10	Well Surface: Flus	sh Mount		
	Depth to	Depth to	Diameter		Material		g/Screen # Used		
D 11	Top (ft.)	Bottom (ft.)	(inches)			(lb	s/ch no.)		
Borehole Casing	0	5	10		PVC		Sch 40		
Screen	5	10	2		PVC		1 40 .010		
	Depth to	Depth to	Outer	Inner		Material			
	Top (ft.)	Bottom (ft.)	Diameter (in.)		Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)		
Grout	0	3	10	2	3	47	4		
Gravel Pack	3	10	10	2		Morie #1			
Grouting Met	hod: Gravity	method		Dri	lling Method: Ho	llow Stem Augers			
ADDITIONA Protective Ca	AL INFORM.	<u>ATION</u>		Dur	np Capacity: _ gpn	n			
		elow land surfa	ce		al Design Head: _				
	Measure Tool:				lling Fluid:	700			
	oment Period: evelopment: <u>Si</u>				ll Rig: <u>Geoprobe 7</u> alth and Safety Pla				
Pump Type:	velopment. <u>Di</u>	<u> Joinersioie</u>		110	inii ana Saioty i iai	1 Submitted: 1 to			
ATTACHM!	ENTS:								
GEOLOGIC	LOG								
0 - 10: Brown	SM - Silty sa	nds, sand-silt n	nixtures						
ADDITION	AL INFORM.	ATION:			· · · · · · · · · · · · · · · · · · ·				

Record -- Page 1 of 1

Arthur Benjamin,

Driller of Record: MONITORING LICENSE # 300257

ENVIRONMENTAL PROBING Company: INVESTIGATION

Well Permit Number E201110445

			MONIT	ORING WE	LL RECORD			
PROPERTY	OWNER: _	K. I. D. REAL	TY CO					
Company/Org	ganization: K	.I.D. Realty Co)					
Address: 49	931 Fisher Islan	nd Dr Miami, I	Florida 33109					
WELL LOC	ATION: Sit	e 016						
Address: 45	5 Linden Ave							
County: Hu	dson	_ Municipality	y: <u>Jersey City</u>		Lot: 4.L	Block: 15	507	
			(Y): <u>676690</u>		DATE WELL ST	TARTED: August 2, 2	2011	
Coordi	nate System: N	J State Plane (NAD83) - USF	EET DA	ATE WELL COM	PLETED: August 2, 2	2011	
WELL USE:	MONITOR:	ING						
Other Use(s)):				Local ID: 010	6-MW-05		
WELL CON	STRUCTION	I						
Total Depth	Drilled (ft.):	10	Finished We	ell Depth (ft.):	10	Well Surface: Flus	h Mount	
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		Wgt/Rating/Screen # Used (lbs/ch no.)	
Borehole	0	10	10					
Casing	0	5	2		PVC		Sch 40	
Screen	5	10	2		PVC	Scl	1 40 .010	
	Depth to	Depth to	Outer	Inner		Material		
Grout	Top (ft.)	Bottom (ft.)	Diameter (in.)	Diameter (in)	Bentonite (lbs.)	Neat Cement (lbs.) 47	Water (gal.) 4	
Gravel Pack	3	10	10	2		Morie #1		
Grouting Met	thod: Gravity	method		Dri	lling Method: Hol	low Stem Augers		
ADDITIONAL INFORMATION Protective Casing: No Pump Capacity: _ gpm Static Water Level: 6 ft. below land surface Total Design Head: _ ft. Water Level Measure Tool: Tape Drilling Fluid: Well Development Period: 1 hrs. Drill Rig: Geoprobe 7720 Method of Development: Submersible Health and Safety Plan Submitted? Yes Pump Type:								
GEOLOGIC			· · · · · · · · · · · · · · · · · · ·	······································				
	n SM - Silty sa	nds, sand-silt n	nixtures					
ADDITION	AL INFORMA	ATION:						

Driller of Record: MONITORING LICENSE # 300257

Arthur Benjamin,

ENVIRONMENTAL PROBING

Company: <u>INVESTIGATION</u>

Well Permit Number E201110446

MONITORING WELL RECURD									
PROPERTY	OWNER: _E	K. I. D. REAL	TY CO			· · · · · · · · · · · · · · · · · · ·			
Company/Organization: K.I.D. Realty Co									
Address: 49	31 Fisher Islan	nd Dr Miami, I	Florida 33109						
WELL LOC	ATION: Site	e 016					· · · · · · · · · · · · · · · · · · ·		
Address: 45	Linden Ave								
County: Hudson Municipality: Jersey City Lot: 4.L Block: 1507									
Easting (X): 607831 Northing (Y): 676624 DATE WELL STARTED: August 3, 2011									
Coordi	nate System: N	J State Plane (NAD83) - USFI	EET DA	ATE WELL COMI	PLETED: August 3, 2	011		
WELL USE:	MONITOR	ING							
				<u> </u>	Local ID: 016	5-MW-06			
WELL CON	STRUCTION	Ī							
	Drilled (ft.):_		Finished We	ell Depth (ft.):	8.5	Well Surface: Flus	h Mount		
	Depth to	Depth to	Diameter		Material		g/Screen # Used		
Borehole	Top (ft.)	Bottom (ft.)	(inches)			(ID:	s/ch no.)		
Casing	0	3.5	2	PVC Sch 40			Sch 40		
Screen	3.5	8.5	2		PVC	Sch	40 .010		
	Depth to	Depth to	Outer	Inner		Material			
	Top (ft.)	Bottom (ft.)	Diameter (in.)	Diameter (in)	Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)		
Grout	0	1.5	10	2	3	47	4		
Gravel Pack	1.5	8.5	10	2		Morie #1	<u> </u>		
Grouting Met	thod: Gravity	method		Dri	lling Method: Holl	ow Stem Augers			
ADDITIONAL INFORMATION Protective Casing: No Pump Capacity: _ gpm Static Water Level: 4 ft. below land surface Total Design Head: _ ft. Water Level Measure Tool: Tape Drilling Fluid: Well Development Period: 1 hrs. Drill Rig: Geoprobe 7720 Method of Development: Submersible Health and Safety Plan Submitted? Yes Pump Type:									
ATTACHM	ENTS:								
GEOLOGIC		unde sand-silt i	mixtures						
0 - 8.5: Brown SM - Silty sands, sand-silt mixtures									
ADDITIONA	AL INFORMA	ATION:				.117			

ENVIRONMENTAL PROBING Arthur Benjamin, Company: INVESTIGATION Driller of Record: MONITORING LICENSE # 300257

Well Permit Number
E201110447

			MONTT	URING WE	LL RECORD		
PROPERTY	OWNER: _	K. I. D. REAL	TY CO				=
Company/Or	ganization: K	.I.D. Realty Co)	·			
Address: 49	931 Fisher Isla	nd Dr Miami, I	Florida 33109	· · · · · · · · · · · · · · · · · · ·			
WELL LOC	ATION: Sit	e 016					
Address: 45	5 Linden Ave						
County: Hu	dson	Municipality	y: Jersey City		Lot: 4.L	Block: 1	507
Easting (X):	607769	Northing	(Y): 676500		DATE WELL ST	TARTED: August 3,	2011
			NAD83) - USF			PLETED: August 3,	· · · · · · · · · · · · · · · · · · ·
WELL USE:	: MONITOR	ING					
					Local ID: 016	6-MW-07	
	STRUCTION						
	Drilled (ft.):		Finished We	ell Depth (ft.):	8.5	Well Surface: Flu	sh Mount
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		ng/Screen # Used
Borehole	0	8.5	10				
Casing	0	3.5	2		PVC		Sch 40
Screen	3.5	8.5	2		PVC	Sc	h 40 .010
	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in)	Bentonite (lbs.)	Material Neat Cement (lbs.)	Water (gal.)
Grout	0	1.5	10	2	3	47	4
Gravel Pack	1.5	8.2	10	2		Morie #1	
ADDITIONAL INFORMATION Protective Casing: No Static Water Level: 4 ft. below land surface Water Level Measure Tool: Tape Drilling Fluid: Well Development Period: 1 hrs. Drill Rig: Geoprobe 7720 Method of Development: Submersible Pump Type: ATTACHMENTS: Drilling Method: Hollow Stem Augers Pump Capacity: _ gpm Total Design Head: _ ft. Drilling Fluid: Drilling Fluid: Drill Rig: Geoprobe 7720 Health and Safety Plan Submitted? Yes							
GEOLOGIC 0 - 8.5: Brow		ands, sand-silt	mixtures				
ADDITION	AL INFORM	ATION:					
	Arthur	Benjamin,				ENVIRONMENTA	AL PROBING

Company: <u>INVESTIGATION</u>

Driller of Record: MONITORING LICENSE # 300257

Well Permit Number **E201110448**

MONITORING WELL RECORD									
PROPERTY	OWNER: _	K. I. D. REAL	TY CO						
Company/Org	ganization: K	.I.D. Realty Co)	·			10.000,000		
Address: 4931 Fisher Island Dr Miami, Florida 33109									
WELL LOC	ATION: Sit	e 016							
Address: 45					•				
County: Hudson Municipality: Jersey City Lot: 4.L Block: 1507									
Facting (X):	607587	Northing	(Y): 676282		DATE WELLS	FARTED: August 3, 2	2011		
1			NAD83) - USFI			PLETED: August 3, 2			
	MONITOR		· · · · · · · · · · · · · · · · · · ·		TIE WEEL COM	TELED. Magast 3, 2			
	· · · · · · · · · · · · · · · · · · ·			•	Local ID: 01	6-MW-08			
			·		2000.120				
	STRUCTION		Dinink of We	11 D41- (A.).	0	W-11 C	L M		
I otai Deptn		9				Well Surface: Flus			
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		g/Screen # Used s/ch no.)		
Borehole	0	9	10						
Casing	0	4	2		PVC		Sch 40		
Screen	4	9	2		PVC	Sch	40 .010		
	Depth to	Depth to	Outer	Inner		Material			
Grout	Top (ft.)	Bottom (ft.)	Diameter (in.)	Diameter (in)	Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.) 4		
Gravel Pack	2	9	10	2		Morie #1	_		
Grouting Met	hod: Gravity	method	<u> </u>	Dri	lling Method: Hol	low Stem Augers			
Protective Ca Static Water I Water Level I Well Develop	Grouting Method: Gravity method Drilling Method: Hollow Stem Augers ADDITIONAL INFORMATION Protective Casing: No Pump Capacity: _ gpm Static Water Level: 5 ft. below land surface Total Design Head: _ ft. Water Level Measure Tool: Tape Drilling Fluid: Well Development Period: 1 hrs. Drill Rig: Geoprobe 7720 Method of Development: Submersible Health and Safety Plan Submitted? Yes								
ATTACHMI	ENTS:								
GEOLOGIC									
0 - 9: Brown	SM - Silty san	ds, sand-silt m	ixtures			· · · · · · · · ·			
ADDITIONAL INFORMATION:									

Record -- Page 1 of 1

Arthur Benjamin,

Driller of Record: MONITORING LICENSE # 300257

c 1

ENVIRONMENTAL PROBING Company: INVESTIGATION

APPENDIX G - CONTOUR MAP REPORTING FORM

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

- 1. Did any surveyed well casing elevations change from the previous sampling event? Yes.. No. If yes, attach new "Well Certification--Form B--Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).
- 2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes. No. If yes, identify these wells.
- 3. Are there any monitor wells present at the site but omitted from the contour map? Yes...No.. Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.
- 4. Are there any monitor wells containing separate phase product during this measuring event? Yes...No.. Were any of the monitor wells with separate phase product included in the groundwater contour map? Yes... No... If yes, show the formula used to correct the water table elevation.
- 5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map? Yes. No. If yes, discuss the reasons for the change.
- 6. Has groundwater mounding and/or depressions been identified in the groundwater contour map? Yes. No.. Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.
- 7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes... No... If no, justify inclusion of those wells.
- 8. Were the groundwater contours computer generated..., computer aided..., or hand-drawn...? If computer aided or generated, identify the interpolation method(s) used.



New Jersey Department of Environmental Protection Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp (For Department use only)

SECTION A. SITE NAME AND LOCATION	(For Department use only)						
Site Name: Site 016							
List all AKAs:							
Street Address: 45 Linden Ave							
Municipality: Jersey City (Township Ber							
County: Hudson (Township, Boro Zip Code: 0730							
Program Interest (PI) Number(s): Case Tracking N							
SECTION B. WELL OWNER AND LOCATION	rumber(s).						
Name of Well Owner K.I.D. Realty							
Well Location (Street Address) 45 Linden Ave							
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L						
SECTION C. WELL LOCATION SPECIFICS	LOCH						
1. Well Permit Number (This number must be permanently affixed to the well casing):	E201110441						
2. Site Well Number as shown on application or plans):	016-MW-01						
3. Well Completion Date:	8/22/2011						
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0						
5. Total Depth of Well to the nearest ½ foot:	9.5						
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	4.5						
7. Screen Length (or length of open hole) in feet:	5						
8. Screen or Slot Size:	.010						
9. Screen or Slot Material:	PVC						
10. Casing Material (PVC, steel, or other – specify):	PVC						
11. Casing Diameter (inches):	2						
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	4.2						
13. Yield (gallons per minute):	1						
14. Development Techinque (specify):	Submersible Pump						
Length of Time well is developed/pumped or bailed (hours and minutes):							



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A. SITE NAME AND LOCATION	(For Department use only)
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Township Re	prough or City)
County: Hudson Zip Code: 07	
Program Interest (PI) Number(s): Case Tracking	
SECTION B. WELL OWNER AND LOCATION	g (variber(s).
Name of Well Owner K.I.D. Realty	
Well Location (Street Address)	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	2017
Well Permit Number (This number must be permanently affixed to the well casing)	E201110442
Site Well Number as shown on application or plans):	016-MW-02
Well Completion Date:	8/18/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	9.5
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	4.5
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	
13. Yield (gallons per minute):	
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A. SITE NAME AND LOCATION	(For Department use only)
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Township, Base	011.)
County: Hudson Zip Code: 0730	,
Program Interest (PI) Number(s): Case Tracking N	
SECTION B. WELL OWNER AND LOCATION	vumber(s).
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):	E201110443
2. Site Well Number as shown on application or plans):	016-MW-03
Well Completion Date:	8/18/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	9.5
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	4.5
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	4.2
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A SITE NAME AND LOCATION	(For Department use only)
SECTION A. SITE NAME AND LOCATION Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Township, Bor	and a constant
County: Hudson Zip Code: 073	
Program Interest (DI) Number(s)	Number(s):
SECTION B. WELL OWNER AND LOCATION	rtamber(s).
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):.	E201110444
2. Site Well Number as shown on application or plans):	016-MW-04
Well Completion Date:	8/02/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	
7. Screen Length (or length of open hole) in feet:	
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	
10. Casing Material (PVC, steel, or other – specify):	
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	5
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A SITE NAME AND LOCATION	(For Department use only)
SECTION A. SITE NAME AND LOCATION Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Tauratic B	
County: Hudson (Township, Bord Zip Code: 0730	and the second s
Program Interest (PI) Number(s): Case Tracking N	
SECTION B. WELL OWNER AND LOCATION	Number(s):
Name of Well Owner K.I.D. Realty	
Well Location (Street Address)	
Well Location (Municipal Block and Lot) Block# 1507	1 - 1 10 - 11
SECTION C. WELL LOCATION SPECIFICS	Lot # 4.L
	E204440445
Well Permit Number (This number must be permanently affixed to the well casing):	
2. Site Well Number as shown on application or plans):	016-MW-05
3. Well Completion Date:	8/02/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	10
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	5
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	5
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A SITE NAME AND LOCATION	(For Department use only)
SECTION A. SITE NAME AND LOCATION Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Tayrackin Dec	
County: Hudson Zip Code: 073	
Program Interest (PI) Number(s): Case Tracking	
SECTION B. WELL OWNER AND LOCATION	Number(s).
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):.	E201110446
2. Site Well Number as shown on application or plans):	016-MW-06
3. Well Completion Date:	8/03/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	8.5
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	3.5
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
5. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A. SITE NAME AND LOCATION	(For Department use only)
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: Jersey City (Township, Boro	ugh or City)
Zip Code: 0730	
Program Interest (PI) Number(s): Case Tracking N	
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):	E201110447
2. Site Well Number as shown on application or plans):	016-MW-07
3. Well Completion Date:	8/03/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	8.5
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	3.5
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	
13. Yield (gallons per minute):	1
14 D	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A CITE NAME AND A SECTION AS CITE NAME A	(For Department use only)
SECTION A. SITE NAME AND LOCATION Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality Jersey City	12 000 11
County: Hudson (Township, Boro	
Program Interest (PI) Number(a):	
SECTION B. WELL OWNER AND LOCATION Case Tracking N	Number(s):
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	LO(#
1. Well Permit Number (This number must be permanently affixed to the well casing):	E201110448
2. Site Well Number as shown on application or plans):	016-MW-08
Well Completion Date:	8/03/2011
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	9
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	4
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.010
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	5
13. Yield (gallons per minute):	1
4. Development Techinque (specify):	Submersible Pump
5. Length of Time well is developed/pumped or bailed (hours and minutes):	1



Monitoring Well Certification Form B - Location Certification

SECTION A. SITE NAME AND LOCATION			
Site Name: Site 016			
List all AKAs:			
Street Address: 45 Linden Ave			
Municipality: City of Jersey City	(Township, Borough or City)		
County: Hudson	Zip Code: 07305		
Program Interest (PI) Number(s):	Case Tracking Number(s):		
SECTION B. WELL OWNER AND LOCATION			
Name of Well Owner K.I.D. Realty			
Well Location (Street Address) 45 Linden Ave			
Well Location (Municipal Block and Lot) Block# 1507	Lot# 4.L		
SECTION C. WELL LOCATION SPECIFICS			
Well Permit Number (This number must be permanently affixed to	the well casing): E201110441		
2. Site Well Number (As shown on application or plans): 016-MW-0			
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:	-		
Latitude: North 40° 41' 21.27"	ongitude: West 74° 05' 06.56"		
4. New Jersey State Plane Coordinates NAD 83 datum, US survey f	eet units, to nearest foot:		
North 676257	ast 607161		
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 9.49			
Elevation Top of Outer casing: 10.00 Elevation of ground: 10.00 (CONC)			
Check one: NAVD 88 □ NVGD29 □ On Site Datum	☐ Other		
6. Source of elevation datum (benchmark, number/description and e	levation/datum). If an on-site datum is used, identify		
here, assume datum of 100, and give approximated actual elevation (referencing NAVD 88).			
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8' (N	AVD 88 DATOM)		
7. Significant observations and notes:			
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL		
I certify under penalty of law that I have personally examined and am fam			
information submitted in this document and all attachments and that, base those individuals immediately responsible for obtaining the information, I lead to the contract of t			
submitted information is true, accurate and complete. Jum aware that the	ere are significant		
penalties for submitting false information including the possibility of fine at	0/5/0040		
Professional Land Surveyor's Signature:	Date		
Surveyor's Name: Steven D. Parent Steven D. Parent			
Firm Name: DPK Consulting, LLC Mailing Address 147 Union Avenue - Suite 10	Certificate of Authorization #: 24GA28042200		
	lew Jersey Zip Code: 08846		
	700 704 0000		
Phone Number <u>732.764.0100</u> Ext.:	Fax: _/32.764.0990		



Monitoring Well Certification Form B - Location Certification

	(1 of Department use only)
SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: City of Jersey City	(Township, Borough or City)
County: Hudson	Zip Code: 07305
Program Interest (PI) Number(s):	Case Tracking Number(s):
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner K.I.D. Realty	
Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1	507 Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
Well Permit Number (This number must be permanently a	ffixed to the well casing): E201110442
2. Site Well Number (As shown on application or plans): 01	
Geographic Coordinate NAD 83 to nearest 1/100 of a second	
Latitude: North 40° 41' 22.10"	Longitude: West 74° 05' 03.74"
4. New Jersey State Plane Coordinates NAD 83 datum, US	
North 676343	East 607377
5. Elevation of Top of Inner Casing (cap off) at reference ma	k (nearest 0.01'): 9.43
	levation of ground: 9.80 (CONC)
Check one: NAVD 88 □ NVGD29 □ On Site	Datum Other
6. Source of elevation datum (benchmark, number/description	n and elevation/datum). If an on-site datum is used, identify
here, assume datum of 100', and give approximated actua	l elevation (referencing NAVD 88).
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=	164.8' (NAVD 88 DATUM)
7. Significant observations and notes:	
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL
I certify under penalty of law that I have personally examined and	900000000 3000000 300000000000000000000
information submitted in this document and all attachments and the those individuals immediately responsible for obtaining the information.	
submitted information is true, accurate and complete. If am aware	
penalties for submitting false information including the possibility	Company of the control of the contro
Professional Land Surveyor's Signature:	Date 3/5/2013
Surveyor's Name: Steven D. Parent	License Number: 24GS03626900
Firm Name: DPK Consulting, LLC	Certificate of Authorization #: 24GA28042200
Mailing Address 147 Union Avenue - Suite 1C	
City/Town: Middlesex Sta	
Phone Number 732.764.0100 Ext	: Fax:732.764.0990



Monitoring Well Certification Form B - Location Certification

SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: City of Jersey City (Township, Borough or C	City)
County: Hudson Zip Code: 07305	•
Program Interest (PI) Number(s): Case Tracking Numb	per(s):
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner K.I.D. Realty	
Well Location (Street Address)	
Z. Well Zeedalen (Gliech Addiese)	# 4.L
SECTION C. WELL LOCATION SPECIFICS	
	10.442
1. Well Permit Number (This number must be permanently affixed to the well casing): E2011	10443
2. Site Well Number (As shown on application or plans): 016-MW-03	
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:	04.20"
Latitude: North 40° 41' 23.55" Longitude: West 74° 05'	01.38
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:	
North 676491 East 607559	
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 8.86	
Elevation Top of Outer casing: 9.39 Elevation of ground: 9.39 (CONC)	
Check one: ☑ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other	
Source of elevation datum (benchmark, number/description and elevation/datum). If an on- here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88	
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8' (NAVD 88 DATUM)	7).
7. Significant observations and notes:	
SECTION D. LAND SURVEYOR'S CERTIFICATION SEA	L
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of	
those individuals immediately responsible for obtaining the information, I believe the	
submitted information is true, accurate and complete. If m aware that there are significant penalties for submitting false information including the bossibility of fine and imprisonment.	
Professional Land Surveyor's Signature:	Date 3/5/2013
Surveyor's Name: Steven D. Parent License N	
Firm Name: DPK Consulting, LLC Certificate of Authoriza	
Mailing Address 147 Union Avenue - Suite 1C	100 Teles (III) segueste representation production and a segueste representation of the seguester representation of the segues
City/Town: Middlesex State New Jersey	Zip Code: 08846
Phone Number 732.764.0100 Ext.: Fax:	732.764.0990



Monitoring Well Certification Form B - Location Certification

SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: City of Jersey City	(Township, Borough or City)
County: Hudson	Zip Code: 07305
Program Interest (PI) Number(s):	Case Tracking Number(s):
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner K.I.D. Realty	
2. Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block	k# 1507 Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS	
Well Permit Number (This number must be permanent)	tly affixed to the well casing): E201110444
Site Well Number (As shown on application or plans):	The second of the second of the second
3. Geographic Coordinate NAD 83 to nearest 1/100 of a	
Latitude: North 40° 41' 25.85"	Longitude: West 74° 05' 01.87"
4. New Jersey State Plane Coordinates NAD 83 datum,	
North 676722	East 607520
5. Elevation of Top of Inner Casing (cap off) at reference	e mark (nearest 0.01'): 8.87
Elevation Top of Outer casing: 9.27	Elevation of ground: 9.26 (CONC)
Check one: NAVD 88 □ NVGD29 □ On	Site Datum
	ription and elevation/datum). If an on-site datum is used, identify
here, assume datum of 100', and give approximated a	
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELE	EV104.0 (NAVD 00 DATOW)
7. Significant observations and notes:	
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL
I certify under penalty of law that I have personally examined	
information submitted in this document and all attachments a those individuals immediately responsible for obtaining the jar	
submitted information is true, accurate and complete. I app a	ware that there are significant
penalties for submitting false information including the passib	
Professional Land Surveyor's Signature:	Date 3/5/2013
Surveyor's Name: Steven D. Parent	License Number: 24GS03626900
Firm Name: DPK Consulting, LLC	Certificate of Authorization #: 24GA28042200
Mailing Address 147 Union Avenue - Suite 1C	
City/Town: Middlesex	State New Jersey Zip Code: 08846
Phone Number <u>732.764.0100</u>	Ext.: Fax: 732.764.0990



Monitoring Well Certification Form B - Location Certification

		or Department use only)
Site Name: Site 016		
one Hame.		
List all AKAs:		
Street Address: 45 Linden Ave		
Municipality: City of Jersey City	(Township, Borough or City)	
County: Hudson	Zip Code: 07305	
Program Interest (PI) Number(s):	Case Tracking Number(s): _	
SECTION B. WELL OWNER AND LOCATION		
Name of Well Owner K.I.D. Realty		
Well Location (Street Address) 45 Linden Ave		
3. Well Location (Municipal Block and Lot) Block# 1507	Lot # 4.L	
SECTION C. WELL LOCATION SPECIFICS		
1. Well Permit Number (This number must be permanently affixe	d to the well casing): E201110445	
2. Site Well Number (As shown on application or plans): 016-M	W-05	
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:		
Latitude: North 40° 41' 25.52"	Longitude: West 74° 04' 58.26"	
4. New Jersey State Plane Coordinates NAD 83 datum, US surve	ey feet units, to nearest foot:	
North 676691	East 607798	
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 7.48	
Elevation Top of Outer casing: 7.79 Eleva	tion of ground: 7.86 (CONC)	
Check one: NAVD 88 □ NVGD29 □ On Site Da	tum	
6. Source of elevation datum (benchmark, number/description ar here, assume datum of 100', and give approximated actual ele		ım is used, identify
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8	,	
7. Significant observations and notes:		
7. Olgrinidant observations and notes.		
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL	
I certify under penalty of law that I have personally examined and am	amiliar with the	
information submitted in this document and all attachments and that, those individuals immediately responsible for obtaining the information		
submitted information is true, accurate and complete. I am aware that	there are significant	
penalties for submitting false information including the possibility of fin	e and imprisonment.	
Professional Land Surveyor's Signature:		Date 3/5/2013
Surveyor's Name: Steven D. Parent	License Number:	24GS03626900
Firm Name: DPK Consulting, LLC	Certificate of Authorization #:	24GA28042200
Mailing Address 147 Union Avenue - Suite 1C		
City/Town: Middlesex State	New Jersey Zip Co	de: 08846
Phone Number <u>732.764.0100</u> Ext.:	Fax: _732.764	1.0990



Monitoring Well Certification Form B - Location Certification

		(For Department use only)
SECTION A. SITE NAME AND LOCATION		
Site Name: Site 016		
List all AKAs:		
Street Address: 45 Linden Ave		
Municipality: City of Jersey City		(Township, Borough or City)
County: Hudson		Zip Code: 07305
Program Interest (PI) Number(s):		Case Tracking Number(s):
SECTION B. WELL OWNER AND LOCATION		
1. Name of Well Owner K.I.D. Realty		
2. Well Location (Street Address) 45 Linden Ave		
3. Well Location (Municipal Block and Lot) Block	ck# 1507	Lot # _4.L
SECTION C. WELL LOCATION SPECIFICS		
1. Well Permit Number (This number must be permane	ntly affixed	to the well casing): E201110446
Site Well Number (As shown on application or plans)		TO 1800ATE
3. Geographic Coordinate NAD 83 to nearest 1/100 of a	,	
Latitude: North 40° 41' 24.17"		Longitude: West 74° 04' 57.43"
4. New Jersey State Plane Coordinates NAD 83 datum		
North 676554		East 607863
5. Elevation of Top of Inner Casing (cap off) at reference	e mark (ne	earest 0.01'): 7.06
Elevation Top of Outer casing: 7.36	Elevation	on of ground: 7.31
Check one: NAVD 88 □ NVGD29 □ O	n Site Datu	m Other
		elevation/datum). If an on-site datum is used, identify
here, assume datum of 100', and give approximated BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP EI		· · · · · · · · · · · · · · · · · · ·
BENCHWARK, NJ12 NJ 1N31 OF TECH 2 CORS ARE EL	_EV104.0	(NAVD 88 DATUM)
7. Significant observations and notes:		
SECTION D. LAND SURVEYOR'S CERTIFICATION		SEAL
I certify under penalty of law that I have personally examine		
information submitted in this document and all attachments those individuals immediately responsible for obtaining the i		
submitted information is true, accurate and complete. I am-	aware that th	here are significant
penalties for submitting false information including the possi	bility of fine	
Professional Land Surveyor's Signature:		Date 3/5/2013
Surveyor's Name: Steven D. Parent		License Number: 24GS03626900
Firm Name: DPK Consulting, LLC		Certificate of Authorization #: 24GA28042200
Mailing Address 147 Union Avenue - Suite 10		
City/Town: Middlesex	State	New Jersey Zip Code: 08846
Phone Number 732.764.0100	Ext.:	Fax: 732.764.0990



Monitoring Well Certification Form B - Location Certification

		(i or Department use only)
SECTION A. SITE NAME AND LOCATION		
Site Name: Site 016		
List all AKAs:		
Street Address: 45 Linden Ave		
Municipality: City of Jersey City	(Township, Borou	ugh or City)
County: Hudson	Zip Code: 07	305
Program Interest (PI) Number(s):	Case Tracking	Number(s):
SECTION B. WELL OWNER AND LOCATION		
1. Name of Well Owner K.I.D. Realty		
2. Well Location (Street Address) 45 Linden Ave		
Well Location (Municipal Block and Lot) Block	k# 1507	Lot # 4.L
SECTION C. WELL LOCATION SPECIFICS		
Well Permit Number (This number must be permanen	atly affixed to the well casing):	E201110447
Site Well Number (As shown on application or plans):		
3. Geographic Coordinate NAD 83 to nearest 1/100 of a		
Latitude: North 40° 41' 22.47"	Longitude: West 7	4° 04' 58.41"
4. New Jersey State Plane Coordinates NAD 83 datum,		
North 676382	East 607788	
5. Elevation of Top of Inner Casing (cap off) at reference		
Elevation Top of Outer casing: 8.86	Elevation of ground: 8.81	
Check one: NAVD 88 NVGD29 □ On	Site Datum	
6. Source of elevation datum (benchmark, number/descr	ription and elevation/datum). If	an on-site datum is used, identify
here, assume datum of 100', and give approximated a	actual elevation (referencing NA	
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELI	EV.=164.8' (NAVD 88 DATUM)	
7. Significant observations and notes:		
3		
SECTION D. LAND SURVEYOR'S CERTIFICATION		SEAL
I certify under penalty of law that I have personally examined	and am familiar with the	
information submitted in this document and all attachments a		
those individuals immediately responsible for obtaining the in submitted information is true, accurate and complete. I am a		
penalties for submitting false information including the possib	ility of fine and imprisonment.	
Professional Land Surveyor's Signature:		Date 3/5/2013
Surveyor's Name: Steven D. Parent	Lice	ense Number: 24GS03626900
Firm Name: DPK Consulting, LLC	Certificate of Au	thorization #: 24GA28042200
Mailing Address 147 Union Avenue - Suite 1C	·	
City/Town: Middlesex	State New Jersey	Zip Code: 08846
Phone Number 732.764.0100	Ext.:	Fax: 732.764.0990



Monitoring Well Certification Form B - Location Certification

SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Ave	
Municipality: City of Jersey City	(Township, Borough or City)
County: Hudson	Zip Code: 07305
Program Interest (PI) Number(s):	Case Tracking Number(s):
SECTION B. WELL OWNER AND LOCATION	
1. Name of Well Owner K.I.D. Realty	
2. Well Location (Street Address) 45 Linden Ave	
Well Location (Municipal Block and Lot) Block# 1507	Lot # _4.L
SECTION C. WELL LOCATION SPECIFICS	
Well Permit Number (This number must be permanently affixed	to the well casing): E201110448
2. Site Well Number (As shown on application or plans): 016-MV	
Geographic Coordinate NAD 83 to nearest 1/100 of a second:	
Latitude: North 40° 41' 21.44"	Longitude: West 74° 05' 00.37"
4. New Jersey State Plane Coordinates NAD 83 datum, US surve	
North 676277	East 607638
5. Elevation of Top of Inner Casing (cap off) at reference mark (n	A
	ion of ground: 8.67 (PAVE)
Check one: NAVD 88 □ NVGD29 □ On Site Date	Secretary Secret
6. Source of elevation datum (benchmark, number/description and	
here, assume datum of 100', and give approximated actual elev	vation (referencing NAVD 88).
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8	(NAVD 88 DATUM)
7. Significant observations and notes:	
7. Olgrimodric observations and notes.	
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL
I certify under penalty of law that I have personally examined and am fa	
information submitted in this document and all attachments and that, be	
those individuals immediately responsible for obtaining the information, submitted information is true, accurate and complete. I am aware that	
penalties for submitting false information including the possibility of fine	and imprisonment.
Professional Land Surveyor's Signature:	Date 3/5/2013
Surveyor's Name: Steven D. Parent	License Number: 24GS03626900
Firm Name: DPK Consulting, LLC	Certificate of Authorization #: 24GA28042200
Mailing Address 147 Union Avenue - Suite 10	
City/Town: Middlesex State	New Jersey Zip Code: 08846
Phone Number 732.764.0100 Ext.:	Fax: _732.764.0990

APPENDIX D-2 DELINEATION INVESTIGATION

SHEET) OF

										-,					JALL	· or
SITE:				SITE OIL	۵		ż			_	TETRA T					
DATE:			1-30						FIELD PERS	SONNEL: 🗀	TRAVIS	FOT				
WEATHE	R:	0	VERCAST.	50° [2	<u>-</u> .											
MONITO	R W	ELL	#: 016_	MW-1	_		9.5	TVC		<u> </u>	SCREEN	IED/OPEN II	NTERVAL:	4.5-9	5' TIC	
WELL PE	RMI	T #			WELL	DIAMETER:	2"	inches								
PID/FID R	EAI	DIN	GS (ppm):	BACKGRO	UND:			PUMI	P INTAKE D	EPTH: 7	ft below	TOC				
						P:							:4.30 ft	below TOC		
						P:										
	(3	٥			SPE	CIFIC	1	DOX	1	DLVED						DEPTH TO
	Ž	2		oH units)	1	CTIVITY 5/cm)	1	NTIAL nv)		(GEN 1g/l)		BIDITY TU)		RATURE	PUMPING	WATER
TIME	PURGING	SAMPLING	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(degrees C)		RATE (ml/min)	(ft below TOC)
	1.2	0,		NA		NA		 	 		<u> </u>				<u> </u>	
10:35	7	L	5.82	NA	1.81	NA	115	NA	7.39	NA	165	NA	14.18	NA	150	4.35
10:40	X		5.78	004	1.82	0.01	103	12	6.28	1.11	93.0	72	14.33	0.15	150	4.35
10:45	*		5.77	0.01	1.82	0.0	98	5	5.31	0.97	67.5	25.5	14.47	0.14	150	4.35
10:50	X		5.76	0.01	1.83	0.01	94	4	4.71	0.10	49.4	18.1	14.53	0.06	150	4.35
10:55	X		5.73	0.03	1.82	0.01	93	l	4.30	0.41	40.5	8.9	14.55	0.02	150	4.35
11:00	×		5.71	0.02	1.82	0.00	92	1	3.89	0.41	45.6	5.1	14.56	0.01	150	4.35
11:05	*		5.71	0.00	1.82	000	91	(3.68	0.21	43.4	2.2	14.61	0.05	150	4.35
11:10	×		5.71	0.00	1.82	0.00	92	i	3.70	0.02	41.9	1.5	14.59	0.02	150	4.35
11:15	×		5.71	0,00	1.81	0.01	91	į	3.67	0.03	38.2	3.7	14.60	0.01	150	4.35
11:20		X					i.									
COMMEN	ITS:		Sampl	d at	11.20					i						-

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

ATE: EATHEI			pdi	3./13 tty sum		1	. 178		FIELD PERS	SUNNEL:	ř.	Konguill	.0			
ONITOR			# <u>Oib.</u>	Mica		LL DEPTH: DIAMETER:		inches			SCREEN	IED/OPEN II	NTERVAL:	4-	9	
D/FID R	EAD	INC	GS (ppm):	BENEATH	OUND: OUTER CAI	P:	· · · · · · · · · · · · · · · · · · ·				ft below		: <u>\$.</u> 1 n1	pelow TOC		
	- 0,	(pH ı	H units)	CONDU	CIFIC CTIVITY /cm)	POTE	DOX NTIAL nv)	OXO	OLVED (GEN 19/l)	i	BIDITY TU)		RATURE ees C)	PUMPING RATE	DEPTH TO WATER (ft below	
TIME	2	S	READING	CHANGE*			CHANGE*	READING	CHANGE*	READING CHANGE*		READING	CHANGE*	(ml/min)	TOC)	
1115	Y	_	7.30	NA	ļ	NA	-(30	NA	760	NA	0.0	NA	13.33	NA	466	4.15
120	X		7 18	,	2.23		-125		1.67		618		14.04		400	4.15
125	X		7.19		2.23		-136		1,17		244		14.18		400	4.15
130	X		7.22		2.23		-144	86	0.96		76.9		14.27		400	4.15
135	Y		7.23		2,22		-146		6.76		30.3		14.26		400	4.15
140	×		7.20		2.21	:	-147		0.69		14.0		14.25		400	4.15
45	X		7.30		2.20		-147		6.67		5.6		14.22		400	-4.15
50	7		7.20		2.26	,	-146		6.55		2.3		14.23		460	4.15
155	7		7.20		2.20		-147		051		1.7		14.25		400	4.15
200	*	X	7.20		2.20		-147		0.48		1.4		14.25		400	4.15

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

															SHEE	TOF
SITE: DATE:	-			131/13					CONSULTIN			F. Rong	مالينا	······································		
VEATHER	₹: _		Po	arthy su	nny w	indy				_		1.15000	<u> </u>			
	WE	LL	#: 016-	. MW63	WE	LL DEPTH: DIAMETER:		inches			SCREEN	IED/OPEN II	NTERVAL:	4.	5-9.5	
ID/FID R	EAD	INC	GS (ppm):		OUND: OUTER CA				P INTAKE D				: 3.7 m	below TOC		
	PURGING	MPLING	•	H ınits)	CONDU	CIFIC CTIVITY s/cm)	POTE	DOX NTIAL nv)	ОХҮ	OLVED (GEN 1g/l)		BIDITY TU)		RATURE rees C)	PUMPING RATE	DEPTH TO WATER (ft below
TIME	2	SA	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	тос)
1243	×		9.19	NA	2.45	NA	-199	NA	4.16	NA	35.2	NA	13.64	NA	400	3.75
1248	Y		9.09		2.54		-228		1.60		21.2		14.10			3.75
(253	7		8.74		2.51	6	-229		0.97		10.3		14.09			3.75
1258	×		8.33		2.54		-220		0.74		5.0		14.18			3.80
1303	χ		7.64		2.57		-191	-	6.59		1,3		14.16			380
1308	y		7.47		2.59		-180		0.49		0.0		14, 23			3.80
Ø13	×		7.42		2.61		-175		0.45		0.0		14,25			3.82
[348	ノメ		7.40		2.63		-170		0.40		0.0		14.27			3.83
1323		¥	7.39		2.64		-167		0.38		0.0		14.28			3.82
OMMEN.	TS:	(collect	Samp	di e	1323										

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

														SHEE	TOF
SITE:	_		ITE 016			·		CONSULTII	NG FIRM:	Tetra	Tech				
DATE:			1-13	1-3- 2-5				FIELD PER	SONNEL:	TRAVIS	KOT				
WEATHE			Sunny												
1		L#: 016	MWOY		ELL DEPTH:					SCREEN	IED/OPEN II	NTERVAL:	5-10'	btic	
WELL PE				WELL	DIAMETER:	<u> </u>	inches								
PID/FID R	EADI	NGS (ppm):	BACKGRO		-	,			EPTH: 7						
				I OUTER CA I INNER CAI	.P:	_ _	DEPT	'H TO WATI	ER BEFORE	PUMP INST	ALLATION	: <u>3.82</u> ft	below TOC		
	1 1	 	BENEATH		CIFIC	- PE	DOX	Dicc	OLVED	1	···	T		T	<u> </u>
	PURGING		рH		ICTIVITY	1	NTIAL	1	YGEN	TURI	BIDITY	TEMPE	RATURE	PUMPING	DEPTH TO WATER
	PURGING	(pH	(pH units) (mS/cm) EADING CHANGE* READING CHANGE* READI			 	nv)	(n	ng/l)	(N	TU)	(degr	ees C)	RATE	(ft below
TIME	Z 3	READING	CHANGE*	1	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	TOC)
9:30	X	6.26	NA	2.74	NA	-43	NA	3.45	NA	41.6	NA	16.49	NA	350	3.85
9:35	X	6.21	0.05	2.76	001	- 44	1	5.78	2.13	14.6	27	16.55	0.06	200	3.00
9:40	*	6.19	0.02	2.76	0.0	-42	1	4.76	1.02	9.8	4.8	16.58	0.03	200	3.81
9:45	K	6.15	0.04	2.75	0.01	-41	1	4.45	001	5.0	4.8	16.69	0.11	700	3.86
9:50	X	6.13	0.02	2.74	10.0	-40)	4.18	0.27	3.2	1.8	16.70	0.01	700	3.85
9:55		6.14	0.01	2.72	0.02	-41	١	3.69	0.49	00	0.0	16.79	009	250	3.84
10:00		6.15	001	2.71	0.01	-43	Z	3.40	0.29	0.0	0.0	1482	0.03	250	3.85
10:05		6.14	0.01	2.71	0.00	-42	1	3.15	0.25	0,0	0.0	16.86	0.04	250	3.85
10.10		6.15	0.0(2.72	0.01	-44	2	2.81	0.34	0.0	එර	14.89	0.03	250	386
10.15		6.14	0.01	2.74	002	-44	0	2.78	6.03	6:0	00	16.89	0.0	750	3.86
10:20		613	0.01	2.74	6.00	-44	0	2.69	0.09	6.0	0.0	16.91)	002	250	3.86
COMMEN	TS:	Shong	hydroco	arbon co	dor.	Se	mplid o	± 134	5						

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

SHEET OF

SITE: DATE:									CONSULTIN		T+ F. Row	juille				
	WE		#: Oi6_			LL DEPTH: DIAMETER:		inches			SCREEN	ED/OPEN IN	NTERVAL:	5-11	১	
PID/FID R	EAD	INC	GS (ppm):		OUND: OUTER CAI						ft below		: <u>3.42</u> ft i	elow TOC		
	PURGING	SAMPLING	(pH ı	oH units)	CONDU (mS	CIFIC CTIVITY (/cm)	POTE (n	DOX NTIAL nv)	DISSOLVED OXYGEN (mg/l) READING CHANGE*		(N.	BIDITY TU) CHANGE*		RATURE ees C) CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
TIME 1216	×	Ŝ	READING	CHANGE*	READING	CHANGE*	reading	CHANGE*	5.58	NA NA	READING 357	NA NA	13.76	NA	400	2.5
1215	×		6.00		1.17		-7		3.57		198		14.51		400	4
ا مديدا	×		3.95		1.09	ı.	-3		2.11		98.1		1433			2.53
1225	x		5.93		1.11	19 10	-2		1.48		62.7		14.42			2.52
1230	Х	9	5.93		į. 10		-5		0.58		46.2		14.46			2.5.2
1235	×		5.92		1. 11		-4		0.42		30.7		14. 53			2.50
1240	γ.		5.92	81	1.10	12	-5		0.41		21.9		14.50			250
1245	7	- 1	5.92		1.09	12.	-5		0.37		24.7		14.52			2.52
1250	×		5.92		1.09		- 5		0.34		24.5		14.50			2.50
1255		X	5.92		1, 10		- 6		0.31		a4.3		14.52			చే.5ఎ
							·			a					п	
COMMEN	TS:		Collect	Sample	@ 1255	5	12				Collected	Dupli	cat e	1300		

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

SITE: DATE: WEATHER	- : -		S, te 1/31 0/61	1 13	vy win	dy			CONSULTIN	_	77 F. Ro	nquille				
MONITOR			#: 016_	FOUN		LL DEPTH: DIAMETER:		inches			SCREEN	IED/OPEN II	TERVAL:	4-9		
PID/FID R	EAC	DING	GS (ppm):		UND: OUTER CAP				NTAKE DI				3.5 ft	pelow TOC	<u> </u>	,
	PURGING	SAMPLING		H units)	CONDU	CIFIC CTIVITY /cm)	POTE	DOX NTIAL nv)	DISSOLVED OXYGEN (mg/l)		1	BIDITY TU)		RATURE ees C)	PUMPING RATE	DEPTH TO WATER (ft below
TIME	PU	SA	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	тос)
917	X		7.87	NA	2.78	NA	-7-4	NA	3.91	, NA	0.0	NA	7.56	NA	460	3.53
932	×		7.80		2.72		-)13		1.91		973		9.30			3.53
927	X		7:61		2.45		-118		1.38		486		9.20			3.23
932	X		7.40		2.49		-110		1.13		داد		9.07			3.75
937	χ		7.35		2.46		-111	3	6.95		157		9.00			3.75
942	X		7.34		2.43		-113		0.30		103		8.96			3.55
947	X		7.31		2.37		-116		0.77		99		8.99			3.55
952	X		7.31		2,32		-115		0.34		93		9.01			3.55
957	4	Ϋ́	7.31		2,34		-113	_	0.71		89		7.00		V	3.35
			· ·													
													1			
COMMEN	TS:	o V	ud sa	mple (e 957			1			·		1	1		

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

															SHEE	T <u>l</u> OF <u>l</u>
SITE:			Cite !						CONSULTIN		17	13 12 29				
DATE: WEATHE	D		<u> </u>			- <u>-</u> ,		 .	FIELD PER	SONNEL: _	F. Revy	-nille				
							2.5							-9 - - c	r 1=	
WELL PE			#: <u>016_1</u>	4WUS		LL DEPTH: DIAMETER:		inches			SCREEN	IED/OPEN II	NTERVAL:	3.5-8	. 2	
			GS (ppm):	DAOYODO										· · · · · · · · · · · · · · · · · · ·		
			(FF).	BACKGRO BENEATH	OUTER CA	P:			P INTAKE D TH TO WATE				. 3 31 ft	below TOC		
					INNER CAP											
	SGING	SAMPLING	_	oH units)	CONDU	CIFIC CTIVITY 5/cm)	POTE	DOX ENTIAL nv)	OXO	OLVED (GEN ng/l)		BIDITY TU)	1	RATURE rees C)	PUMPING RATE	DEPTH TO WATER (ft below
TIME	5			CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	TOC)		
923	Y		7.71	NA	3.00	NA	71	NA	3.90	NA	245	NA	6.24	NA	3+5	2,40
9.28	×		7.59		3.71		-35		1.75		229		Q.60		375	3.40
9.33	×		7.91		3.53		-137		1.36		142		7.92		375	3,40
938	×		7.93		3.42		-156		0.96		55-5		7.93		375	3,40
943	×		7.93		3.41		-161		0.83		21.4		7.93		375	3,40
749	×		7.53		3,40		-143		087		10.0		7.93		375	340
753	×		7.93		3.39		-166		0.74		5.8		7.93		375	3.40
958	7		7 94		3.37		-169		0.71		સ્વ		7.94		375	3.40
1003		7	7.14		3.37		-171		6.63		1.0		795		375	3 - fc
			•													
			,													
COMMEN			llect so	mple (<u>ي اوه :</u>	3										

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SITE: DATE: WEATHER				5iler(ast					CONSULTIN							
MONITOR WELL PER			#: MW-	10		LL DEPTH: DIAMETER:		 inches			SCREEN	IED/OPEN II	NTERVAL:	29-3	14' bgs	
PID/FID R	EAD	IN	GS (ppm):			P:	· · · · · · · · · · · · · · · · · · ·				ft below PUMP INST		: 7.65 n	below_TOC	Ade	
							POTE	DOX NTIAL nv)	DISSOLVED OXYGEN (mg/l)		1	BIDITY TU)		RATURE ees C)	PUMPING RATE	DEPTH TO WATER (ft below
TIME	2	SA	READING	CHANGE*		CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	TOC)
9:30	X		7.14	NA	5.49	NA	-23	NA	5.18	NA	675	NA	11.50	NA	250	7.80
935	7		7.06		7.10		75		2.65		359		12.30		250	780
940	X		705		7.31		-82		2.07		162		12.63		250	780
945	X		7.08		6.94		-89-		1.73		77.4		13.01		250	7.81
950	X		7.10		6.67		-92		1.59		33.1		13.08		250	7.81
955	X		713		6.47		-95		1.44		18.1		13.26		250	7.81
1000	*		7.15		6.29		-98		1.30		7.2		13.26		250	7.81
10.05	X		7.10		6.14		-100		1.20		4.2		13.44		250	7.81
1010	۴		718		6.02		-101		1.16		1.0		13.52		250	781
1015	X		7.19		5.95		-103		1.14		0.0		13.60		250	7.80
1020	٢		7,20		5.90		-103		1.10		0.0		13.61		250	7.80
COMMEN	TS:	/	Sampled	at 10	0:30		:			25			•	•		

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															SHEE	TOF
SITE: DATE:				(1)>			,		CONSULTII	NG FIRM: SONNEL:		74 Rengulle				
WEATHE	R:			ici								AL ALL AND			··	
MONITOI WELL PE			# <u>016</u>	MWil		LL DEPTH: DIAMETER:		inches			SCREEN	IED/OPEN II	NTERVAL:	14-1	9	
PID/FID R	REAI	DIN	GS (ppm):		OUND: OUTER CAP						ft below		: <u>6.5</u> ft	below TOC		
	SPECIFIC CONDUCTIVITY (pH units) (mS/cm) READING CHANGE* READING CHANGE*		POTE	REDOX DISSOLVED POTENTIAL OXYGEN (mv) (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE	DEPTH TO WATER (ft below					
TIME	2	SA	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	(ml/min)	TOC)
1102	7		7.95	NA	4.75	NA ·	-69	NA	7.64	NA	0.0	NA	45.4	NA	400	U.5A
1110	×		7.67		5.42		- 141		`⊋. <i>3</i> €		-		9.05		40-	653
गार	Y		7.69		5.36	,	-155		1.71		730		9.17		400	6.52
lac	γ		7.71		5.20		-163		1. 27		345		9.15		460	4.52
1125	X		7.71		5.15		-14-1		1.67		172		1.07		400	¥ 52 V
1/36	Y		7.71		214	-	-165		G. 85		123		7.05		400	v.52
1135	X		7.72		5.11		-172		0.33		34.2		9.05		400	6.52
1140	7		7.79		5.09		-176		0.77		79.7		9.06		<100	6.5-2
1145	7	ji.	7.73		5.67		-178		0,72		74.3		7.00		401	6.52
1140		¥	7.73		5.05		-174		0,69		70.1		9.04	,	400	6.52
- 1 1					_											
COMMEN						:										
	C	bll	ect sew	uple @	1150											

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

SHEET ___ OF ___

SITE: PPG Life OILO DATE: 1-30-13 WEATHER: 32° f, cloucky windy. MONITOR WELL # PPGH-MVIO2 WELL DEPTH: 16.35' TIC WELL PERMIT #: WELL DIAMETER: 2 inches								TKot		NTERVAL:	7.35 -	(6 35'	ric		
PID/FID READINGS (ppm): BACKGROUND: PUMP INTAKE DEPTH: 11.8 ft below FOC TIC ; 14.1 64.0 BENEATH OUTER CAP: DEPTH TO WATER BEFORE PUMP INSTALLATION: 5.35 ft below TOC BENEATH INNER CAP:										2					
	TIME OF SUPPLIES O		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE	DEPTH TO WATER (ft below	
1310	X	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING 11.28	CHANGE*	(ml/min) 350	5,60
1315	X	5.47		7.40	,	16		8 cZ		0.8		11.06		250	5.57
1320	*	5.94		7.41		.19		4.88		0.0		11.02		250	5.57
1325	4	5.90		7.42		22		5.51		0.0		11.00		250	5.57
1330	4	5.89		7.44		20		5.07		00		11.00		250	5.57
1335	*	5.87		7-43	;	20		4.71		0,0		11.00		250	6.57
1340	+	5.85		7.42		19		4.26		0.0		11.05		250	5.56
1345	4	5.84		7.42		17		4.18		0.0		11.01		250	5,56
1350	*														
						ī									
						-		1							
COMMEN	TS:	Samp	led at	(11.8)	12/50			ı							

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

SHEET OF

SITE:		୍ଦ	76- ST	T 01/0	**	- 12	 		CONCILI TIN	IG FIRM:	Taba T					
DATE:	-	*		1-31-13						ONNEL:						
	R:		Martin .	Juny 4	6°5 his	h wind			I ICED PER		1 401			1541		
			<u> </u>			·	1011	_				-		2 = 1	المر	
WELL PERMIT #: WELL DIAMETER: 2" inches WELL DIAMETER: 2" inches																
PID/FID READINGS (ppm): BACKGROUND: PUMP INTAKE DEPTH: 6 ft below TOC; 8																
				BENEATH	OUTER CA	P:	<u> </u>			R BEFORE		,		below TOC		
				BENEATH	INNER CAP): 										
	(2)	Ş		•		CIFIC		REDOX		DISSOLVED						DEPTH TO
	Ž			oH units)	CONDUCTIVITY (mS/cm)		POTENTIAL (mv)		OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING	WATER
TIME	PURGING	SAMPLING	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	RATE (ml/min)	(ft below TOC)
		G	5.84				†:	· · · · · · · · · · · · · · · · · · ·		 	8.6					
13:15	,	Ц	5.97	NA	0.543	NA	109	NA	11.57	NA	0.4	NA	7.96	NA	275	1.10
13:20	X		5.48	0.36	0.529	0014	125	100	7.83	374	7.4	1.2	8.26	0.3	275	1.10
13.25	*		5.38	0.1	0.564	0.035	123	2	6.18	1.65	7.7	0.3	7.79	0.47	275	(Y)
1330	X		5.36	00,2	0.604	0.04	124	1	4.72	1.46	6.9	08	7.59	02	775	110
1335	*		5,35	0.01	0:632	0.028	124	٥	4.37	0.35	6.9	0	7.47	0.12	275	1.20
1340	X		5.35	0.0	0.689	0.057	124	0	4.02	0.35	6.5	04	7.51	0.04	275	1.20
1345	+		5,35	0.0	0.715	0.026	125	•	3.67	0.35	6.2	0.3	7.56	0.05	275	1.20
1350	+		5.34	0.01	0.753	0.038	125	O	3.55	0.12	5.4	0.8	739	0.17	275	1.21
1355	*		5.39	0.05	0.760	0.007	122	3	3.50	0.05	5.6	0.7	7.31	0.08	7275	1-20
1400	X		5.39		0 763		170		3.51		5.2		7.28		275	1.20
		*						40								
COMMEN	TS:	(o' interior	al colle	cted at	14:05	=									

^{*}INDICATOR PARAMETERS HAVE STABLIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

New Jersey State Department of Environmental Protection Bureau of Water Allocation and Well Permitting Mail Code 401-03 PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number E201300252

MONITORING WELL RECORD									
PROPERTY OWNER: K.I.D. REALTY CO									
Company/Organization: K.I.D. Realty Co									
Address: 4931 Fisher Island Dr Miami, Florida 33109									
WELL LOCATION: Site 016									
	Linden Ave F								
	County: Hudson Municipality: Jersey City Lot: 35 Block: 27401								
Easting (X): 607654 Northing (Y): 676275 DATE WELL STARTED: January 14, 2013									
Coordinate System: NJ State Plane (NAD83) - USFEET DATE WELL COMPLETED: January 14, 2013									
WELL USE:	MONITOR	ING							
Other Use(s)	:				Local ID: 016	5-MW-10			
WELL CON	STRUCTION	Ī							
		34	Finished We	ell Depth (ft.):	34	Well Surface: Abov	ve Grade		
Depth to Depth to Diameter Material					Wgt/Rating	g/Screen # Used			
	Top (ft.)	Bottom (ft.)	(inches)			(lbs	s/ch no.)		
Borehole	0	34	10						
Casing	0	29	2	PVC Sch 40					
Screen	reen 29 34 2 Sch 40 PVC .020						.020		
	Depth to	Depth to	Outer	Inner Material					
	Top (ft.)	Bottom (ft.)			Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)		
Grout	0	27	10	2 2	5	94	8		
Gravel Pack	27	34	10	I		Morie #1			
Grouting Met	hod: Pressur	e method (Trer	nie Pipe)	Dri	lling Method: Holl	ow Stem Augers			
Protective Ca Static Water I Water Level I Well Develop		elow land surfa <u>Tape</u> 1 hrs.	ce	Tot Dri Dri	np Capacity: _ gpm al Design Head: _ ft Iling Fluid: Il Rig: <u>Geoprobe 77</u> 2 alth and Safety Plan	<u>20</u>			
ATTACHMI									
GEOLOGIC									
0 - 2: Grey O' 2 - 34: Brown		nds. sand-silt n	nixtures						
2 - 34: Brown SM - Silty sands, sand-silt mixtures									
ADDITIONA	AL INFORMA	ATION:							
	ADDITIONAL INFORMATION:								

New Jersey State Department of Environmental Protection Bureau of Water Allocation and Well Permitting Mail Code 401-03 PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number E201300344

MUNITURING WELL RECORD									
PROPERTY OWNER: NJ DOT									
Company/Organization: NJ DOT									
Address: 200 Stierli Court Mount Arlington, New Jersey 07856									
WELL LOCATION: Site 016									
Address: State Route 185									
County: Hudson Municipality: Jersey City Lot: ROW Block: ROW									
Easting (X): 607685 Northing (Y): 676206 DATE WELL STARTED: January 15, 2013									
Coordinate System: NJ State Plane (NAD83) - USFEET DATE WELL COMPLETED: January 15, 2013									
WELL USE: MONITORING									
Other Use(s): Local ID: 016-MW-9									
	STRUCTION								
		8	Finished We	ell Denth (ft):	8 V	Well Surface: Flus	h Mount		
Total Depth		1							
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		g/Screen # Used s/ch no.)		
Borehole	0	8	10						
Casing	0	3	2						
Screen	reen 3 8 2 Sch 40 PVC .020						.020		
	Depth to	Depth to	Outer	Inner		Material			
	Top (ft.)	Bottom (ft.)	` /	Diameter (in)	\ /	Neat Cement (lbs.)	Water (gal.)		
Grout Gravel Pack	0	8	10 10	2 2	3	47 Morie #1	4		
	-	e method (Tre			lling Method: Hollo				
_			ine ripe)	Dii	ining Method. Hono	ow stelli Augers			
ADDITIONA Protective Ca	AL INFORMA	<u>ATION</u>		Diir	np Capacity: _ gpm				
		elow land surfa	ce		al Design Head: _ ft.				
Water Level 1	Measure Tool:	<u>Tape</u>		Dri	lling Fluid:				
	oment Period:			Dri	ll Rig: Geoprobe 772	<u>20</u>			
Pump Type:	evelopment: Su	<u>ibmersible</u>		Неа	alth and Safety Plan S	Submitted? Yes			
ATTACHM	ENTS:								
GEOLOGIC									
0 - 2: Grey O									
2 - 8: Brown	SM - Silty san	ds, sand-silt mi	ixtures						
ADDITIONAL INFORMATION:									

ENVIRONMENTAL PROBING

Company: INVESTIGATION

Robert Flemming,

Driller of Record: MONITORING LICENSE # 0024435

New Jersey State Department of Environmental Protection Bureau of Water Allocation and Well Permitting Mail Code 401-03 PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number E201300345

			MONIT	ORING WE	LL RECORD				
PROPERTY OWNER: NJ DOT									
Company/Organization: NJ DOT									
Address: 200 Stierli Court Mount Arlington, New Jersey 07856									
WELL LOCATION: Site 016									
Address: State Route 185									
County: Hudson Municipality: Jersey City Lot: ROW Block: ROW									
Easting (X): 607722 Northing (Y): 676308 DATE WELL STARTED: January 14, 2013									
Coordii	Coordinate System: NJ State Plane (NAD83) - USFEET DATE WELL COMPLETED: January 14, 2013								
WELL USE:	MONITOR	ING							
Other Use(s)	:				Local ID: 016	5-MW-11			
WELL CON	STRUCTION	1							
Total Depth	Drilled (ft.):	16	Finished We	ell Depth (ft.):	16	Well Surface: Abo	ve Grade		
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		g/Screen # Used s/ch no.)		
Borehole	0	16	10						
Casing	0	11	2	PVC Sch 40					
Screen	11	16	2	Se	ch 40 PVC		.020		
	Depth to	Depth to	Outer	Inner		Material			
G .	Top (ft.)	Bottom (ft.)	Diameter (in.)	` '	\ /	Neat Cement (lbs.)	Water (gal.)		
Grout Gravel Pack	9	9	10 10	2 2	3	47 Morie #1	4		
	hod: Gravity	1	10		lling Method: Holl				
•	AL INFORMA				g 				
Protective Ca		ATION		Pur	np Capacity: _ gpm				
		elow land surfa	ce		al Design Head: _ ft	.•			
	Measure Tool: oment Period:				lling Fluid: ll Rig: <u>Geoprobe 77</u> 2	20			
Method of De	evelopment: Si				alth and Safety Plan				
Pump Type:									
<u>ATTACHM</u>	ENTS:								
GEOLOGIC									
0 - 2: Grey O' 2 - 16: Brown		nds, sand-silt n	nixtures						
	AL INFORMA								
1122110111	1111111111111								

Record -- Page 1 of 1

Robert Flemming,

Driller of Record: MONITORING LICENSE # 0024435

ENVIRONMENTAL PROBING Company: INVESTIGATION



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: State Route 185	
Municipality: Jersey City (Township, Boroug	gh or City)
County: Hudson Zip Code: 07305	
Program Interest (PI) Number(s): Case Tracking Num	mber(s):
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner NJ DOT	
Well Location (Street Address) 200 Stierli Court - Mount Arlington, NJ 07856	
Well Location (Municipal Block and Lot) Block# ROW	Lot # ROW
SECTION C. WELL LOCATION SPECIFICS	
Well Permit Number (This number must be permanently affixed to the well casing):	E201300345
Site Well Number as shown on application or plans):	016-MW-11
Well Completion Date:	1/14/2013
Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	16
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	11
	5
	.020
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	4
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

	(For Department use only)
SECTION A. SITE NAME AND LOCATION	
Site Name: Site 016	
List all AKAs:	
Street Address: 45 Linden Avenue	
1 Post Control of the	nship, Borough or City)
	Code: 07305
Program Interest (PI) Number(s): Case	e Tracking Number(s):
SECTION B. WELL OWNER AND LOCATION	
Name of Well Owner K I D Realty	
2. Well Location (Street Address) 4931 Fisher Island Dr - Miami, FL 33	3109
Well Location (Municipal Block and Lot) Block# 27401	Lot # 35
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the w	ell casing):
2. Site Well Number as shown on application or plans):	016-MW-10
Well Completion Date:	1/14/2013
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0
5. Total Depth of Well to the nearest ½ foot:	34
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest	0.01'):
7. Screen Length (or length of open hole) in feet:	5
8. Screen or Slot Size:	.020
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0	0.01'): 4
13. Yield (gallons per minute):	1
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1



Monitoring Well Certification Form B - Location Certification

	(For Department use only)						
SECTION A. SITE NAME AND LOCATION							
Site Name: Site 016							
List all AKAs:							
Street Address: 45 Linden Ave							
Municipality: City of Jersey City	(Township, Borough or City)						
County: Hudson	Zip Code: 07305						
Program Interest (PI) Number(s): Case Tracking Number(s):							
SECTION B. WELL OWNER AND LOCATION							
Name of Well Owner K I D Realty							
2. Well Location (Street Address) 4931 Fisher Island Drive - M	ami, FL 33109						
3. Well Location (Municipal Block and Lot) Block# 27401	Lot # <u>35</u>						
SECTION C. WELL LOCATION SPECIFICS							
Well Permit Number (This number must be permanently affixed	to the well casing): E201300252						
Site Well Number (As shown on application or plans): 016-MW.							
Geographic Coordinate NAD 83 to nearest 1/10 of a second:							
Longitude: West 74° 05' 00.2" Latitude: North 40° 41' 21.4"							
New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:							
North 676273 East 607650							
5. Elevation of Top of Inner Casing (cap off) at reference mark (ne	earest 0.01'): 10.95 (TOP OF PVC)						
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.) BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8' (NAVD 88 DATUM)							
7. Significant observations and notes:							
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL						
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.							
Professional Land Surveyor's Signature:	Date 2/21/2013						
Surveyor's Name: Steven D. Parent	License Number: 24GS03626900						
Mailing Address 147 Union Avenue - Suite 1C Certification of Authorization #: 24GA28042200							
City/Town: Middlesex State New	w Jersey Zip Code: 08846						
Phone Number 732.764.0100 Ext.:	Fax: 732.764.0990						



Monitoring Well Certification Form B - Location Certification

Date Stamp

	(For Department use only)						
SECTION A. SITE NAME AND LOCATION							
Site Name: Site 016							
List all AKAs:							
Street Address: State Route 185							
Municipality: City of Jersey City	(Township, Borough or City)						
County: Hudson	Zip Code: 07305						
Program Interest (PI) Number(s): Case Tracking Number(s):							
SECTION B. WELL OWNER AND LOCATION							
Name of Well Owner NJ DOT							
2. Well Location (Street Address) 200 Stierli Court	- Mount Arlington, NJ 07856						
Well Location (Municipal Block and Lot) Blo	ock# ROW Lot# ROW						
SECTION C. WELL LOCATION SPECIFICS							
Well Permit Number (This number must be permane	ently affixed to the well casing): E201300345						
2. Site Well Number (As shown on application or plans							
3. Geographic Coordinate NAD 83 to nearest 1/10 of a							
Longitude: West 74° 04' 59.3" Latitude: North 40° 41' 21.7"							
4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:							
North 676305 East 607719							
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.43 (TOP OF PVC)							
BENCHMARK: NJ12 NJ INST OF TECH 2 CORS ARP ELEV.=164.8' (NAVD 88 DATUM)							
7. Significant observations and notes:							
SECTION D. LAND SURVEYOR'S CERTIFICATION	SEAL						
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.							
Professional Land Surveyor's Signature:	Date 2/21/2013						
Surveyor's Name: Steven D. Parent	License Number: 24GS03626900						
Mailing Address 147 Union Avenue - Suite 1C Certification of Authorization #: 24GA28042200							
City/Town: Middlesex	State New Jersey Zip Code: 08846						
Phone Number 732.764.0100	Ext.: Fax:732.764.0990						

APPENDIX G - CONTOUR MAP REPORTING FORM

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

- 1. Did any surveyed well casing elevations change from the previous sampling event? Yes.. No. If yes, attach new "Well Certification--Form B--Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).
- 2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes. No. If yes, identify these wells.
- 3. Are there any monitor wells present at the site but omitted from the contour map? Yes...No.. Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.
- 4. Are there any monitor wells containing separate phase product during this measuring event? Yes...No.. Were any of the monitor wells with separate phase product included in the groundwater contour map? Yes... No... If yes, show the formula used to correct the water table elevation.
- 5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map? Yes. No. If yes, discuss the reasons for the change.
- 6. Has groundwater mounding and/or depressions been identified in the groundwater contour map? Yes. No.. Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.
- 7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes... No... If no, justify inclusion of those wells.
- 8. Were the groundwater contours computer generated..., computer aided..., or hand-drawn...? If computer aided or generated, identify the interpolation method(s) used.