April 24, 2008 Project SCA89991

SAP: 135244

Mr. Jerry Wickham Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject:

Well Destruction Proposal Shell-branded Service Station 8999 San Ramon Road Dublin, California



Dear Mr. Wickham,

Delta Consultants (DELTA) on behalf of Shell Oil Products US (SHELL) has prepared the following Well Destruction Proposal for the Shell-branded service station located at 8999 San Ramon Road in Dublin, California. The Site Map and Well Locations are presented in Figure 1.

BACKGROUND

The subject property is located on the southeast corner of the intersection of Alcosta Boulevard and San Ramon Road intersection in Dublin, California (Figure 1). The property is currently the site of an active Shell-branded service station. The Shell service station plans to demolish and then rebuild the existing station building and carwash.

Prior to commencing field activities DELTA will obtain the proper permits from Zone 7 Water Agency (Attachment A). The proposed destruction locations will be marked and Underground Services Alert contacted to notify subscribers of our proposed activities. DELTA will then direct a geophysical survey of the proposed well locations. Prior to destruction activities the proposed locations will be excavated by air-knife to a depth of at least five feet. These activities will be performed to avoid damage to subsurface utilities. All work will performed under the direction of a California Professional Geologist.

GROUNDWATER MONITORING WELL DESTRUCTION

DELTA prepares to perform well destruction activities on May 22 and 23, 2008 on monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-10 (Attachment B). The wells mentioned are located on the station property, which will be renovated. Gregg Drilling (GREGG), License C57-485165, will provide the field equipment and materials. A Delta geologist will oversee and manage the well destruction activities.



Permits for well destruction have been submitted to Zone 7 Water Agency who will determine the destruction method of either drilling out the well or pressure grouting. In the case of drilling out the monitoring well location will be overdrilled the entire depth of the well and the resulting borehole will be backfilled with grout to within one foot of the surface and a concrete cap will be placed to the adjacent grade. Drill cuttings and well materials will be placed in sealed, 55-gallon steel drums pending characterization and disposal.

In the case of pressure grouting, a tremie pipe with attached hose will be placed down each well and 15-sack neat cement grout will be pumped into the well-casing to approximately 0.5-foot below grade (bg). The tremie pipe and hose will then be pulled from the well and a steel fitting with hose connector will attach to the wellhead. The grout hose will connect to the fitting and grout will be pumped into the well under 50 pounds per square inch (psi) of pressure for approximately 15 minutes. The vault boxes will then be removed and the upper casing of each well will be drilled out to a depth of five feet bg. The remaining borehole will be grouted to within 1.5 feet of the ground surface, and capped with concrete to match the surrounding grade. Drill cuttings and well materials will be placed in sealed, 55-gallon steel drums pending characterization and disposal. DELTA will prepare a State of California Department of Water Resources (DWR) Well Completion Reports for the well and submit them to GREGG for signatures, prior to submittal to the appropriate agency.

After completion of station remodeling, DELTA will evaluate locations for replacement monitoring wells on the station property and install replacement wells.

REMARKS

The information contained in this report represent DELTA's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between DELTA and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of DELTA's Client and anyone else specifically listed on this report. DELTA will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, DELTA makes no express or implied warranty as to the contents of this report.

If you have any questions, please call Richard Garlow (DELTA) at (408) 826-1880 or Denis Brown (SHELL) at (707) 865-0251.

Sincerely,

DELTA Consultants

Abhik Dutta

Staff Geologist

Richard A. Garlow, M.S., P.G.

Project Manager

ATTACHMENTS:

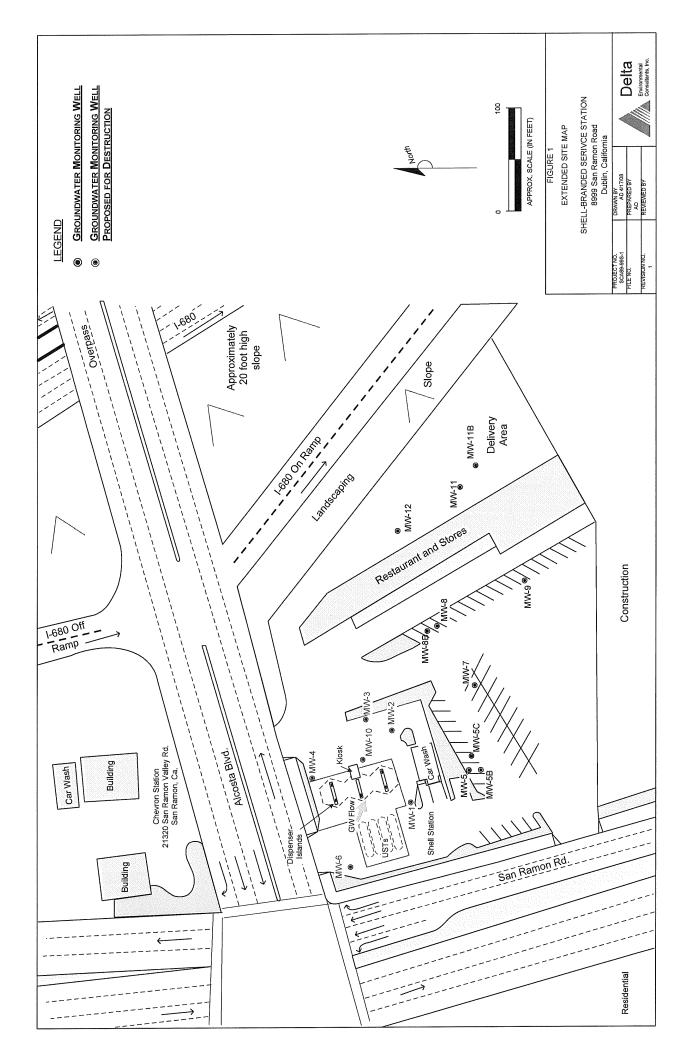
Figure 1 – Site Map with the Well Locations

Attachment A – Zone 7 Water Agency Permit Application Attachment B – Boring Logs Well Construction Permits

Cc:

Denis Brown, Shell Oil Products US Betty Graham, RWQCB – San Francisco Bay Region Danielle Stefani, Livermore-Pleasanton Fire Department Matthew Katen, Zone 7 Water Agency

FIGURES



ATTACHMENT A

Zone 7 Water Agency Permit Application

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306 E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPL	ETE			FOR OFFICE USE	
LOCATION OF PROJECT 8999 San Ramo	 n Rd.	DED	MIT NUMBER		
Dublin, CA. 945	68				
		APN <u>.</u>			
California Coordinates Source ft. CCN	Accuracy•ftft.			PERMIT CONDITIONS ed Permit Requirements Ap	oply)
CLIENT Name Shell Oil Products U.S. – Denis Bi Address 20945 S. Wilmington Ave Pr City Carson, CA Zipt APPLICANT Name Delta Consultants – Abhik Dutta Email adutta@deltaenv.com Address 312 Piercy Rd	one 707-865-0251 90810 Fax408-225-8506	A.	Zone 7 office 2. Submit to Zo work the ori Drillers Repo	plication should be submitte e five days prior to propose one 7 within 60 days after of ginal Department of Water ort or equivalent for well proj tch for geotechnical project id if project not begun with	d starting date. completion of permitte Resources Water We ects, or drilling logs an s.
Address 312 Piercy Rd. Procity San Jose Zip TYPE OF PROJECT: Well Construction Gathodic Protection Cathodic Protection PROPOSED WELL USE: Domestic Other Irrigation Remedia Industrial Groundwater In Dewatering Other	nvestigation	В.	well casing d Minimum sea or 20 feet for is specially a Grout placed An access po on the wellhe	face seal diameter is four i iameter. al depth is 50 feet for munic domestic and irrigation well	ipal and industrial wel s unless a lesser dept meter is required ments.
Dewatering •• Other DRILLING METHOD: Mud Rotary •• Air Rotary •• Hollow S Cable Tool •• Direct Push •• Other DRILLING COMPANY Gregg Drilling DRILLER'S LICENSE NO. C57-485165 WELL SPECIFICATIONS: Drill Hole Diameter 10 in. Maximum Casing Diameter 4 in. Depth Surface Seal Depth 20-21 ft. Num	Stem Auger	C.	GROUNDWATER PIEZOMETERS 1. Minimum st the well or p 2. Minimum st depth pract 3. Grout place GEOTECHNICA heavy bentonite areas of known	R MONITORING WELLS IN urface seal diameter is found in the properties of the propert	ur inches greater tha er. wells is the maximur compacted cuttings o ompacted material. I tion, tremied cemer
SOIL BORINGS:		E.		hole above anode zone w	_
	imum h ft.	F.	WELL DESTRU	CTION. See attached.	
ESTIMATED STARTING DATE 5/21 ESTIMATED COMPLETION DATE 5/22		G.	completion of	DITIONS. Submit to Zone permitted work the we bil and water laboratory	II installation repo
I hereby agree to comply with all requirements of County Ordinance No. 73-68. APPLICANT'S SIGNATURE	this permit and Alameda	Аррг	ovedWy	man Hong	_Date

ATTACH SITE PLAN OR SKETCH



ATTACH SITE PLAN OR SKETCH

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306 E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

	FOR APPLICANT TO COMPLETE		FOR OFFICE	USE	
LOCATION C	DF PROJECT 8999 San Ramon Rd. Dublin, CA. 94568	WELL N	T NUMBERNUMBER		
APN 94: CLIENT Name SAddress City APPLICANT Name Email Address City San Jos TYPE OF PR Well Construct Well Destruct Cathodic Prof PROPOSED Domestic Municipal Industrial Dewatering DRILLING MI Mud Rotary Cable Tool DRILLING CO DRILLER'S L	Se Zip 95138 **COJECT: ction	1 2 3 4 5 C. 6 F 1 2 3 D. 6 h a	PERMIT CONE (Circled Permit Requision (Circled Permit Requision Service) A permit application should Zone 7 office five days prior. Submit to Zone 7 within 60 work the original Department of the permit is permit in the project not date. WATER SUPPLY WELLS Minimum surface seal diam well casing diameter. Minimum seal depth is 50 feor 20 feet for domestic and it is specially approved. Grout placed by tremie. An access port at least 0.5 if on the wellhead for water least 0.5 in on the wellhead for water least 0.5 in the well or piezometer can depth practicable or 20 feet. Minimum surface seal diam the well or piezometer can depth practicable or 20 feets. Minimum seal depth for it depth practicable or 20 feets o	uirements Apply) I be submitted so as r to proposed starting days after completic ent of Water Resource for well projects, or onical projects. It begun within 90 days after is four inches greater is four inches greater for municipal and inches in diameter is evel measurements. If the discharge pipe is the discharge pipe is the discharge pipe in the discharge pipe is the discharge pipe is the discharge pipe in the discharge pipe is th	g date. on of permitted es Water Well drilling logs and ys of approval reater than the industrial wells a lesser depth required hear the IG s greater than the maximum red cuttings or d material. In mied cement
SOIL BORING Number Hole Dia	GS: of Borings Maximum ameter in. Depth ft.	tr	CATHODIC. Fill hole above ar remie. VELL DESTRUCTION. See 8		rete placed by
ESTIMATED ESTIMATED	STARTING DATE 5/21 COMPLETION DATE 5/22	G. S c	SPECIAL CONDITIONS. Subrompletion of permitted woincluding all soil and water	mit to Zone 7 within ork the well instal	lation report
	_	Approv	ed Wyman Hong	Date	

ATTACHMENT B

Boring Logs

			Project		SJ89-99			Clien		Shell Oil Pro			Well No: MW-1	
			Logged	ву:		Buckingh	am	Loca		8999 San R	-		Page 1 of 2	
		ta	Driller:		Gregg				Drilled:	5/5/2005	Lo	ocation Map		
			Drilling I	Method:	HSA			Hole	Diamete	r: 10 inch				
	- I		Samplin	ig Method:	CA Mod	l, Split Sho	e	Hole	Depth:	27 ft	F	Please se	ee site map	
Envi	ronm	ental	Casing	Туре:	PVC			Well	Diamete	r: 4 inch				
Cons	ultant	s, Inc.	Slot Size	e:	0.01			Well	Depth:	27 feet				
		,	Gravel F	Pack:	#2/12			Casi	ng Stick	up: NA	- 1			
				Elevation			Nort			Easting				
Well Con	npletion	Static	Ø +≠	gui	ē €	(Fig.	Sa	mple	l g					
)	Water	Moisture Content	Reac pm)	etraf ws/(ار ا (را	ery	ö	Soil Type		LITHOLOGY / DESCRIPTION			
Backfill Casing		Level	၌ပိ	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Secov	Re In						
****					A		Lr.	T	AF	Asphalt 6", Base	e rock 4	ŧ		
						1 1							/ -114. £1 4	
*****] _	-		SM			1; 20-309	% silt; fine to coarse grained	
*****						2-	 			sand, well grade	ea .			
****					و ا	_	1	<u> </u>						
*****			l		8 6	3								
₩₩					air knifed & hand augered									
*****			1		Z Z	 4		L	CL				n brown mottled with	
*****				[ᇓ	-							ine grained sand in tan	
*****					ا " ٻڌ	5—				sand pockets; m	noderate	to high	plasticity; soft	
S E			dry	11.3		5				-			77 (0473 110314	
Grout						6								
							<u> </u>							
****					₩	7								
****						<i>'</i>	<u> </u>			******				
*****						8								
****						۱ ° _								
*****						9								
*****						_	<u> </u>							
****					12	10								
‱				335	13	10								
****					19	11								
****						11								
****						40 -								
****						12							4 - 41-41 - 41	
****						13 —								

****						14								
****						, , , , , , , , , , , , , , , , , , ,]						
***					12	15								
****				328	26	10							own with very dark brown	
****					25	16							fine grained sands; low to	
‱ ∣						10				moderate plastic				
 						47 —								
⋘∥						17								
₩						10								
‱ I						18				LANGE CONTRACTOR OF THE PERSON			TVI hadronia de di	
‱∦ I			ĺ			46		\neg						
‱ l			moist			19——			ŀ			.,,		
⋙ ∣	-		.,,	22.6	50	_								
‱ ∣				٠.٠	for	20			ŀ					
XXX					6"				ŀ					
<u> </u>		<u>v</u>	dama		ا	21			ŀ					
Bentonite		l	damp				 		ŀ				مراب اردو ه	
ŭ 2		j	l			22			ŀ					
digital	- 1			-	1		1	1						

	Project N Logged E		SJ89-99 Heather	S-1 Buckingha		Client Locati		Shell Oil Products I 8999 San Ramon F		Boring No: MW-1 Page 2 of 2
Delta Environmental Consultants, Inc.	Driller: Drilling M	fethod: g Method: 'ype: :	Gregg HSA	. Split Shoe	! !	Date [Hole [Hole [Well [Well [Casin	Drilled; Diameter Depth: Diameter Depth: g Sticku	5/5/2005 T: 10 inch 27 ft T: 4 inch 27 ft	Location Map	ee site map
		Elevation		·	NOILI	ng .		Lasting		
Well Completion Static Water Static Water Completion Static Water Completion	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Recovery &	Interval d	Soil Type	LIT	HOLOGY	/ DESCRIPTION
		ALLA SAVOLATORIA		23 —			CL	Sandy Lean CLAY: o	continued	
Sand	_1	9.4		24—— — 25——			CL	Lean CLAY with Sar	od: came a	s above stiff
	damp	9.4		26— 27—				Boring terminated at 2		
				28—						
				29 — — 30 —			-	111 AAA A 5 5 7 8 7 8 1		
- - -				31 —			 			
			·	33— — 34——			- - - -			
				35——			-		1	
				36——			-			
				38				3,200		
				40				LANGE TO THE PARTY OF THE PARTY		
_ 				42				ALAD (FEBRUARIES		
				44 —			-			

			Ta :							0 0	10	DAZ-U NI, BRAZ O
			Project I		SJ89-99			Clien		Shell Oil Products t		Well No: MW-2
			Logged	Ву:	Heather	Buckingha	am	Loca	tion:	8999 San Ramon F	Rd., Dublin	Page 1 of 2
	_ 1	L	Driller:		Gregg			Date	Drilled:	5/5/2005	Location Map	
	el		Drilling N	Method:	HSA			Hole	Diameter	: 10 inch		
		LU	_	g Method:		. Split Sho	е		Depth:	27 ft	Please s	ee site map
Envi	ronme	néal	Casing		PVC	. Opin Ono	•		Diameter		1 10000	oo olo map
			Slot Size		0.01				Depth:	. 4 inch 27 feet		
COUR	ultants	, iliG.							•			
			Gravel F	· · · · · · · · · · · · · · · · · · ·	#2/12	1	K1. *		ng Sticku			
				Elevation			Nort	ning		Easting		
Vell Con	npletion	01	0	PID Reading (ppm)	Penetration (blows/6")	(F)	Sa	mple	ω		I	
= ~	.	Static Water	Moisture Confent	Ead (iii	ratii	Depth (feet)			Soil Type	IIT	שחו הפע	/ DESCRIPTION
Sir	'	Level	ś 년	x g	low let	£.	8	2	E	lal I	HOLOGI	/ DESCRIPTION
Backfill Casing		LG461	ک چے ا	l II	g &	<u>ا</u> ۵	Recovery	Interval	ν l			
XX					†				AF	Asphalt 6", Base rock	4"	AND
****						1	-		SM	Silfy SAND: light brow	wn: 20-300	% silt; fine to coarse graine
***	-						-			sand, well graded	WII, 20-30	o sitt, litte to coalse graine
***					'	2			ŀ	<u> </u>		SCHOOL STATE OF STATE
***	-				% pe		1-					La filable and
₩	-				je je	3	+					
****					消 流	_	+					
XXX					air knifed and auge	4	 			MILE		
XXX					air knifed & hand augered	-	-		_,	Loon OLAV with O -	سيلام ممريات	n brown mottled with
XXX			- , ,	44.0		5	 			Lean CLAY with San		
Grout			dry	11.3		_	ļ					ine grained sand in tan
5 \$						6	<u> </u>			sand pockets; modera	ite to high	plasticity; soft
****					₩	7	ļ					
****						l '						
****						8						
****						_						
****						9						
***						9						
****					12	40				The state of the s	· · · · · · · · · · · · · · · · · · ·	
***				335	13	10 —						a Control of the Cont
****					19							
XXX						11			ľ	*AR Link to		
	-										~ 14	A HAMPINA TOWNS AND ADMINISTRATION OF THE PARTY OF THE PA
₩						12		-	}			***************************************
 				*		13			-			
 						_]				VA.
XXX						14			<u> </u>		4444	**************************************
XX						1-7			ſ			
₩					12	15			Γ			
₩	,			328	26	٠٠				(Same as abov	e, less ora	nge mottling)
‱ ∣					25	10			-	* ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , ,	
₩						16						A. W. W. A. W. C.
₩I									-			II.M.
₩ I						17 ——		\dashv	上	VI PRINT VA LEDRING ALL CONTRACTOR AND ADDRESS AND ADD		TANA
⋙						-			<u> </u>			S MANY (Supremental Association)
₩		Ì				18		\dashv	· -			M
₩ I						-		\dashv		YNA Y PAR M PALLAN		W-7 0117846V L. 444
₩ I			moist			19 ——						, n
₩ I			HOISE	20.0	50				-			, , , , , , , , , , , , , , , , , , ,
▩▮]		22.6	50	20			_, -	Sandul son Ol AV.	row EE to	GEO/ finos: 2E to 4E0/
₩ l		l			for					Sandy Lean CLAY; g		00% 111165, 30 10 45%
: "&			. 1		6"	21			5	sand; low plasticity; so	III	THE OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNE
	_		damp						_			
			ŀ			22						
3 3 1		ı	1	1		~~						

	Project		SJ89-99			Clien		Shell Oil Products		Boring No: MW-2
	Logged	Ву:	Heather	Buckingha	m	Loca		8999 San Ramon F	Rd., Dublin	Page 2 of 2
Dalla	Driller:		Gregg			Date	Drilled:	5/5/2005	Location Map	
Delta	Drilling I		HSA			Hole	Diameter	r: 10 inch		
	Samplin	g Method:	CA Mod	l. Split Shoe	•	Hole	Depth:	27 ft	Please se	ee site map
Environmental	Casing	Туре:	PVC			Well	Diameter	: 4 inch		
Consultants, Inc	. Slot Size	e;	0.01			Well	Depth:	27 ft		
	Gravel F	Pack:	#2/12			Casi	ng Sticku	p: NA		
		Elevation			Nort	hing		Easting		
			T	<u> </u>				MANAGEMENT OF THE PARTY OF THE	<u></u>	WHAT IN COMMISSION OF THE PARTY
Well Completion Stati	a t	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)		mple	Soil Type			
≣ p Wate		Res ppr	ows.	₩ ₩	ven	Š	i.	LIT	HOLOGY	/ DESCRIPTION
Cass Cast Mate	ĮΣO	OE)	P G	Dep	Recovery	Interval	δ			
						<u> </u>	CL	Sandy Lean CLAY: 0	continued	
				23 —						
								77, 7d PMA-5 = 44.		
				24						<u> </u>
Sand				-				All the state of t		777
SS 🗏	damp	9.4		25			CL	Lean CLAY with Sar	nd: same a	s above, stiff
				26 —						NA LOCAL DESIGNATION AND ADMINISTRATION OF A SECURITION OF A S
				-				Boring terminated at 2	27 foot hal	ow around curface
				27				Doming terminated at a	27 TOOL DOI	ow ground sarrace
—	·			١,, ٦				**************************************		TA PILLAN AL
				28			. [T IN IT III .		
				29				-1.		(1-140-41) A. L.
_				_			ŀ	W1 707 VL71		
				30			ŀ		***	
				31 —						
			.	31						
				32			-			,
_				-			-			10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
				33			.	44-144		and the state of t
				34				N-HAAL		A TO LANGUAGE BY IN THE STATE OF THE STATE O
				-		\blacksquare	-	1		(And) (And)
			•	35 —			-			
				, 			-			Photos.
				36						The state of the s
				37			_			A No. 1 Marie
					\dashv		-			
				38—	_		·			
				39			-			11.6.1
4										
—				40	\dashv	-	-	PAYA A A A A A A A A A A A A A A A A A A		411.
<u></u> .				41						Part (A) M a P (A)
4				''	_		_	W M. L.		717111111111111111111111111111111111111
				42-	_			W. L. W.		CAR WATER
		,		. +			H			
				43						
		.		44	\Box					

			Project I		SJ89-99			Clien	ıt:	Shell Oll Products U		Well No: MW-3	
			Logged	Ву:	Heather	Buckingl	nam	Loca	tion:	8999 San Ramon R	d., Dublin	Page 1 of 2	
	\ _ I	11	Driller:		Gregg			Date	Drilled:	5/6/2005	Location Map		
		ta	Drilling N	Method:	HSA			Hole	Diamete	r: 10 inch			
		LCA	1	g Method:	CA Mod	. Split Sh	ioe	Hole	Depth:	26 ft	Please se	ee site map	
l En	vironm	nental	Casing 1	-	PVC	•			Diamete	r: 4 inch		·	
		ts, inc.	Slot Size		0.01				Depth:	26 feet			
0011	Suitaii	to, inc.	Gravel P		#2/12				ng Stickt				
				Elevation	11414	1	Nort		0110/10	Easting			
				Liovation									
Well C	ompletion	1 04-41-	0 +	PID Reading (ppm)	e C	et)	Sa	mple	Φ				
	ס	Static Water	stur	in (in line)	tratii vs/6	(fe			Ę	117	HOLOGY	/ DESCRIPTION	
Backfill	Casing	Level	Moisture Content		Penetration (blows/6")	Depth (feet)	Recovery	Interval	Soil Type				
æ	ပ္ပ			₹	4 5	ă	Re.	Int	0,				
					^	_			AF	Asphalt 6", Base rock	4"		
		1	wet	-		1				O'IA O SAID. II	00 000	V allk fina to approp anginad	
*****						-	_	<u> </u>	SM		vn; 20-309	% silt; fine to coarse grained	
*****		-				2—		 		sand, well graded			
 	_	_		· ·	. 0	-		 					
 					4 & ere	З							
 	_	1			air knifed & hand augered	ı ّ .							
‱₩		1			주 교	4			CL	Sandy Lean CLAY: n	nedium bro	own mottled with	
*****	_	_	damp		ari	' .						ine grained sand in tan	
‱]			قا ا	5				sand pockets; trace gr		o 0.5" in diameter;	
Grout				1.8		J —				moderate to high plas	asticity; soft		
Gro		1	·										
00000		1				6							
‱	_	1											
‱		1	dry		'	7							
‱	-												
‱		-				8							
*******		-											
*******		-				9	-			William			
‱					8	-						7177174	
‱		1	dry	0.5	10	10							
‱	-	-	diy	0,9	16	-			CL	Lean CLAY with San	d: mediun	n brown with orange	
‱		-			10	11 —	-					fine grained sand in tan	
‱	 	-				_				sand pockets; modera			
******		-				12		<u> </u>		sanu pookets, modela	ιο μιασιισίι	y, Joic	
‱	_	-				_	-					ng .	
******		.				13 —			//			-4	
‱	-	-						 					
**********						14		 				No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
******	-				ا ,, ا	_							
******			<u> </u>		14	15	-		<u> </u>	0	ا بدالتد ا		
******			dry	0.6	24		-					own; 70-80% fines; 20-30%	
******		.]			36	16						in tan sand pockets; slight	
******	_					-				product odor; moderat	e to high p	plasticity; stiff	
*******		. I				17							

*****]				18							
*****]	1						/ [
¥xxxxX ₩]	ĺ			19 —							
5 3						10			ľ				
Bentonite		🔻	l		15	20			ľ				
Bentonite		—	dry	0.2	21	20 —			CL	Lean CLAY with San	d: same a	s above; medium brown	
			,		25	-				with dark brown mottlir			
#			j			21 —			ľ				
E	3 -						+-1						
F	∄ —		l		ļ	22—	+ -		ŀ				
F											in territories de la companya de la		

	Project I		SJ89-99			Clien		Shell Oil Products U		Boring No: MW-3
	Logged	Ву:		Buckingha	m	Loca	tion:	8999 San Ramon R	d., Dublin	Page 2 of 2
D-11-	Driller:		Gregg			Date	Drilled:		Location Map	
Delta	Drilling N	Method:	HSA			Hole	Diamete	r: 10 inch		
POILA	1	g Method:	CA Mod	. Split Shoe)	Hole	Depth:	25 ft	Please s	ee site map
Environmental	Casing -	Туре:	PVC			Well	Diamete	r: 4 inch		
Consultants, Inc.	Slot Size		0.01			Well	Depth:	26 ft		
·	Gravel F	ack:	#2/12			Casir	ng Sticku	ıp: NA		•
		Elevation			Nort	hing		Easting		
			1		i		T T			
Well Completion Static	e te	ding	Penetration (blows/6")	Depth (feet)	Sa	mple	Soil Type			
₩ater	Moisture Content	Rea	etra	₽ (†	ven	٧al	Ę	LIT	HOLOGY	/ DESCRIPTION
Casing Mater Level	žΰ	PID Reading (ppm)	Per Jg	Оер	Recovery	interval	δ			
	<u> </u>				Į.i.,		CL	Lean CLAY with San	nd: continu	red
		-		23						J
Sand				23						
S				24		<u> </u>	ľ			74 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1
				- ' -	22,020					
			9	25					00 =	00/ floor, 00 400/
	dry	0.7	16	-			CL	sandy Lean CLAY: g	rey; 60-70	0% fines; 30-40% sand;
			27	26				low to moderate plast Boring terminated at 2	OR foot bot	low around surface
				-		-		Boring terminated at 2	zo leer bei	low ground surface
				27				•		
_				-						
				28						
_				-						
				29						
				١,, ٦					***************************************	
	i i			30						
				31—				•	VALUE OF THE PARTY	
a seudane				32						
				33						
_				-		-				
—				34						
						<u> </u>				
				35 —						
				-						
			i	36		$\vdash \vdash$				
									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
W				37						
				38—						
				30						
				39						
pro-10-000				40						
				-		-				
				41						
_								A CONTRACTOR OF THE STATE OF TH		A ROW WHEN IN THE TOTAL PROPERTY OF THE TOTA
		'		42						
				42 T			Ì			
				43			İ			
				44						
				7-4						

				Project f		SJ89-99)S-1		Clien	t;	Shell Oil Products I		Well No: MW-4	
]				Logged	Ву:		Bucking	ham	Loca		8999 San Ramon F		Page 1 of 2	
	1_		4_	Driller:		Gregg				Drilled:	5/6/2005	Location Map		
	JE	31	ta	Drilling N		HSA				Diamete		Disease		
I					g Method:		. Split St	ioe		Depth:	27 ft	Please se	ee site map	
			ental	Casing 1		PVC				Diamete				
Con	rsulf	tants	s, inc.	Slot Size		0.01				Depth: ng Sticku	27 feet p: NA			
				Gravel F	Elevation	#2/12	1	Nort		ig Stickt	ρ. ΝΑ Easting			
					Elevation			NOIL	mig		Luoting			
Well C	Casing	letion	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Recovery G	Interval of	Soil Type	LIT	HOLOGY	/ DESCRIPTION	
						A				AF	Asphalt 6", Base rock	4"		
				wet			1							
****							'		ļ	SM		wn; 20-309	% silt; fine to coarse grained	
	1.						2—		<u> </u>		sand, well graded		1	
						਼ ਨੂ	~		ļ					
]					d & ere	3-	_	ļ	! 				
	1	\dashv				air knifed & hand augered	.		<u> </u>		Onedu Lace OLAV.	madium be	own mottlad with	
	-					rkr d 8	4			CL	Sandy Lean CLAY: r	HEUIUIII DI	ine grained sand in tan	
		_				aji	.				cand nockets: trace a	gravels up to 0.5" in diameter;		
*******	-			dry	3.		5—	-	-		moderate to high plas	ticity: soft	0 0.5 in diamotor,	
Grout		-		ury	"			-			moderate to mgn plac	Aloney, out		
Į Ū	-			İ			6-		-					
****		\dashv					_ ·	_						
	-					Y	7							
****							ੵ '							
****	-						8—				of the section of the section is the section of the			
****							9							
****	-						9							
						8	10—							
****	1			dry	1.3	10	'Ŭ .			CL	Lean CLAY with San	id: mediun	n brown with orange	
****	-					16	11—				mottling; 85-90% fine	s; 10-15%	fine grained sand in tan	
****		_						_			sand pockets; modera	ate plastici	ty; sort	
₩₩	-					1	12		_					
		\dashv							-					
****	-	-					13 —	-					- 1 M - 4 M	
		\dashv												
*****	-						14 —							
*****		\dashv				14					THE RESERVE OF THE PERSON OF T	1 P and the state of the state	And the state of t	
	-	\dashv		dry	0.7	24	15—			CL	Sandy Lean CLAY: 9	rey mottle	d with medium brown;	
****						36	46				75-80% fines; 25-30%	fine grain	ed poorly graded sand in	
	-	\neg					16—				tan sand pockets; mo	derate to h	igh plasticity; stiff	
₩₩							17 <i>-</i>							
 	$ ^{-}$						' /							
‱	_						18							
₩₩	$\ \ ^{2}$						٠.٠							
*****	_						19—				AND THE STREET			
‱		\perp				,	_							
	_				0.7	15	20 —			-	(Como no obos	a traca an	avale un to 0.5 cm in	
*****				moist	0.7	21	-	-				e, nace gr	avels up to 0.5 cm in	
ight (S	-					25	21 —				diameter)	ter)		
Bentonite		4	I				-	-		ŀ				
k a 3	-						22			ŀ			,	
	1	- 1				i l		ı	r 1	- 1				

										-		
			Project N	lo:	SJ89-99	S-1		Clien	t:	Shell Oil Products U		Boring No: MW-4
			Logged I	Зу:	Heather	Buckingha	m	Locat	ion:	8999 San Ramon R	d., Dublin	Page 2 of 2
	_	4	Driller:		Gregg			Date	Drilled:	5/6/2005	Location Map	
De		TA	Drilling N	/lethod:	HSA			Hole	Diamete	r: 10 inch		
		i		g Method:	CA Mod	. Split Shoe)	Hole	Depth:	27 ft	Please se	ee site map
Envir	ronme	ental	Casing 1		PVC			Well	Diamete	r: 4 inch		
Consu			Slot Size		0.01			Well	Depth:	27 ft		
		•	Gravel P	ack:	#2/12			Casir	ng Sticku			
				Elevation			Norti	ning		Easting		
Well Com	nletion			5 0	Τ	_					<u> </u>	
		Static	Moisture Content	ng (c	Penetration (blows/6")	Depth (feet)		nple	Soil Type	g 9444	"''''''	/ DECODIDATION
Backfill Casing		Water	oist	Re. (ppn	lows	Æ	over	Interval	T lio	LII	HOLOGY	/ DESCRIPTION
Backfill Casing		Level	20	PID Reading (ppm)	8 G	<u>a</u>	Recovery	Inte				
										Sandy Lean CLAY:	continued	PANIA.
				·		23—			CL			
			•			23 —						
						24						and A. b. Pro-
						24						
Sand					9	25 ——				N WWW HIT - T		
ığ 🗏			wet	0.4	16					VIII		1 241
			dry		27	26				Lean CLAY with Sar	nd: mealur	n brown with grey mottling;
									CL	grey; 85-90% fines; 1	0-15% sar	nd; moderate plasticity; stiff
						27				Boring terminated at 2	Z/ feet bei	ow ground surface
	_					_						
						28						
				,		-						
						29						
	•					-						
						30						
	-							-				
						31 —						
	_				l					1		
						32				-		
						33 —						
										1.0		
						34						
	1.00					25						
			'		-	35						
						36 —						
						-						
						37		<u></u>				Alba PW T
						۱ ^۲ ′ –						
						38						
												The state of the s
						39 —					Linearin	
	_							_				
						40		\vdash				The Part of the Pa
	_					-						•
						41		-		<u> </u>		
	_											
						42				•		
	\dashv											
	-					43						
	\dashv											
						44				4 - 14 - 17 - 17 - 17 - 17 - 17 - 17 - 1		
						,	1				AND DESCRIPTION OF THE PARTY OF	

											Shell Oil Products	l IC	Well No: MW-6	
		-		o:SJ89-99-					Client		8999 San Ramon, Dublin,CA	US	Page 1 of 2	
				By: Andy Pe	(FS)O				Locat		2/21/2006	Location Map	L Y	
De	~I ·	10	Driller: G	regg lethod: WK	ねかい	H2/	1				er: 12" - 10"			
	J	la		ı Method: H			`			Depth:		Please s	see site map	
Envir				ype: SCh 4						Diamete				
Consu			Slot Size						Well I	Depth:	30'			
Consu	1160116	3, 1110.		ack: 2/12/ s	and					ig Stick				
				Elevation				North	ning		Easting			
Wel	,													
Comple		Static	£ 79	PID Reading (ppm)	Penetration	61)	Depth (feet)		ample g					
l .		Water	Moisture Content) Read (ppm)	efra	/SMC	th (f	Recovery	Za <	Soil Type	LIT	THOLOGY	() DESCRIPTION	
Backfill Casing		Level	န္ဗိပိ	Ö B	Pen	ola)) Geb	ပ္မ	Interval	S			i	
<u> а</u> С				ш-	_			- K	_	AF	~6" asphalt and baseroo	k		
					Î	•	-							
							1	 		CL	sandy lean CLAY: dark	grey, 40-	50% fine to med, grained	
			damp	32.5					*		sands, med.plasticity			
			Gamp		'		2							
	_				≪	hand augered	3-							
	,				air knifed &	g n	_	a secondario			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	450/ fino	to med. grained sands	
		1	damp	18.5	<u> </u>	ਯ	4		•		dark brown, 35	5-45% IIII	to med. grained sands	
					ä,	ä	· -		 					
							5	-	├					
Grout	_	-	daman	50.6			-		•		orangish brow	n, 40-50%	fine to med. grained sands	
Gro			damp	50.0			6-		_	1				
	_	-				r			ļ					
		1			*	•	7-			İ				
							8			١٠٠.				
		1								,	OLAY/- anduda	ele brown	10-20% fine grained sands,	
]					9—	_	1	CL	trace gravels up to 1" di	a trace c	ratiche med Plasticity	
	_		1.	00.4			-				trace gravers up to 1 ur	a., naoo o	and to the same of	
	 		damp	86.1			10-		Y	1				
	_	1					-	_	1	1				
		1					11—		†					
	-						١,, ٠							
		~					12-]				
	-	1					13			١,٠,٠				
	ļ 	ĺ					' .			``	The AM of the language	E 150/ fi	ne grained sands, med.	
]					14-			CL	lean CLAY: dark brown	i, 5-15% ii	ne grained sando, med.	
		1								1	plasticity			
		_	damp	11.8			15		_ Y	┨				
	_	-							╁─	1				
		-	l				16—		+	1				
	-	1					, -, '	\dashv	1	1				
		-					17-]`.				
	-	1					18-] ``·		. la una	grou (discolaration) 40-50%	
		1		1			' -			sc	clayey SAND: greenish	of nword	grey (discoloration), 40-50%	
arite							19-	_	1	4	fines, med. to fine grain	eu sanus,	iow piasticity	
Bentonite	_	_	1.				' '	-:		1				
<u> </u>	1		damp	6.2		niking an and	20		*					

Well No: MW-6 Shell Oil Products US Project No:SJ89-99-1 Client: Page 2 of 2 8999 San Ramon, Dublin,CA Logged By: Andy Persio Location: Location Map Date Drilled: 2/21/2006 Driller: Gregg Hole Diameter: 12" - 10" Drilling Method: WK to 7'/HSA Please see site map Hole Depth: 71/301 Sampling Method: HA/SS Well Diamete 4" Casing Type: SCh 40 PVC Environmental Well Depth: 30' Slot Size: 0.01 Consultants, Inc. Casing Stickup: 0 Gravel Pack: 2/12/ sand Easting Northing Elevation Well PID Reading (ppm) Penetration (blows/6") Sample Depth (feet) Soil Type Completion Moisture Content Static LITHOLOGY / DESCRIPTION Recovery Interval Water Casing Level clayey SAND (cont.) 21 lean CLAY w/sand: brown w/orange mottling, med. stiff, CL 15-25% fine grained sands, trace gravels up to 1/4" dia. 24.6' 24 damp 11.3 25. 26 27 28 clayey SAND w/gravel: greyish brown w/orange mottling, SC med. Dense, 30-40% fines, 5-15% gravels up to 1/2" dia., 29 no plasticity 1.9 moist 30 Bottom of boring terminated at 30' bg 33 35 36 37 39 40

				1=	MAAANA SIITAA	0.100.00			Ollen	1.	Shell Oil Products	TIS	Well No: MW-10
				Project N		SJ89-99 Andy Pe			Clien		8999 San Ramon	. 50	Page 1 of 2
		_		Logged E	sy:	•	สเบ			Drilled:	7/25-26/06	Location Map	1
		. [4		Driller: Drilling M	lathad:	Gregg	レフハ			Diamete			
		7	La			HSA / A	K (1)			Depth:	29'	Pleases	see site map
					Method:	SS Sch 40 l	n) (C			Depui. Diamete		'	•
			ntal	Casing T		0.01	740			Depth:	29'		
Con	sult	ants	, Inc.	Slot Size Gravel P		#2/12 sa	and			ng Sticki			
				Graver	Elevation	#4112 30	110	Nort		ng Otloke	Easting	-	
					Licration							1	
	Vell				말	8.	#	Sa	mple	w			
Com)II	Static	Moisture Confent	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	1	-	Soil Type	Lr	THOLOG\	/ / DESCRIPTION
Backfill	Casing		Water Level	Aois Corr	贤 穿	low let	l fg	Recovery	Interval	 			
Ba	Ö		1000	20	BE	% =	۵	Rec	Ę	"			
		_				A				AF	~9" asphalt and ~3" l	baserock	A A A A A A A A A A A A A A A A A A A
							1 -						dames 40 20% finos
	-			1			'			SC	clayey SAND: light g	rey, medit	ım dense, 10-20% fines,
							2-		ļ		fine to medium grain	ed sands,	no plasticity
	-					٥	-						
						air knifed & hand augered	3-]			
						air knifed and auge			<u> </u>	l,			
						도명	4-		<u> </u>	138			
	ı					g g;			- A	, `` <u>`</u>	CLAV.	ded brown stiff 20 40% fine grainer	
	١.			moist	3.6	ا اح	5-		▼_		sandy lean CLAT.	lark brown, stiff, 30-40% fine grained and cobbles up to 3" b-axis diameter,	
ğ						1 1			ļ	CL		and coppi	es up to o b axio diameter;
Grout	_					1 1	6-		-	-	low plasticity		
- 11	- 1							_					
	-					▼	7-		┼	-			
									 	-			
	-					1	8-		┼─	١,			
						1			A	134			
	-			maint	29.5	8	9-		-	CL.	lean CLAY w/sand: o	ark brown	, 20-30% fine to medium
		-		moist	29.5	14		-		1	grained sands, very	stiff. trace	gravels up to 2" b-axis
	-					'-	10-		- V	1	diameter, low plastic	itv	
		\dashv	•					-	+	1	Office of the second		
	-						11-		T^{-}	1			
		-					1	-	1	1		****	
	-						12-		T	1			
		-						+-	1	1			
	-						13-		1				
		-				7	 		A	1	10-20% fine to	medium	grained sands, trace gravels
	-			moist	5.1	8	14-			1	up to 1" b-axis	diameter	
						10	1		V				
	-					1	15-	100000				A MANUFACTURE OF THE PARTY OF T	
		\dashv				1	40						
	-						16-						
in ite		_					17						
Bentonite	-						17-						
ď		\dashv					18-] * , , ,			
anninin	-						10-			```			
멸						5	19-		1	CL	sandy lean CLAY: da	ark grwy w	/greenish discoloration,
Sand	3			moist	3.5	1]	hard, 30-40% fine to	medium g	rained sands, low plasticity
						16	20	2000	4 ₩				

ſ

							HOUD - In-	US Well No: MW- 10
	Project N		SJ89-99		Cllen		Shell Oil Products	Page 2 of 2
	Logged By:		Andy Perslo		Location:		8999 San Ramon 7/25-26/06	Location Map
Delta	Driller:		Gregg			Drilled:		Cooding) map
LJEIIA	Drilling M		HAS/ Ak	(7')		Diamete	•••	Please see site map
	Sampling		SS			Depth:	29'	Flease see site map
Environmental	Casing T		Sch 40 F	PVC		Diamete		
Consultants, Inc.	- C. C. C. C. C. C. C. C. C. C. C. C. C.		0.01 #2/12 sand		Well Depth: Casing Sticku Northing		29' ap: NA	
							Easting	
					Noruning		Luoting	
Well		<u> </u>	E _	₽	Sample	_O		
Completion Static	Moisture Content	E E	Penetration (blows/6")	Depth (feet)	1	Soil Type	LE	HOLOGY / DESCRIPTION
는 한 Water Level	loist	8. <u>c</u>	low Tet	둸	Recovery		–	
Casing Mater Level	20	PID Reading (ppm)	g &	8	Recovery	σ,		
				_		CL	sandy lean CLAY (co	nt.): me as above, no discoloration
				21	 	}	dark brown, sa	me as above, no discoloration
				-		1		
				22] ,		
22.85'	1			23 —		```,		
4:00p			4	24] _, `	lean CLAY w/sand: o grained sands, low p	ark brown, very stiff, 15-25% fine
٧ <u> </u>	moist	1.3	8 12	-		CL	granied sarids, low p	actions
			12	25 —	- V			
				26 —				
			7	27 —			same as abov	9
	moist	1.2	10 14	28				
				-				
				29 —			29'bg = botton	of boring/well
	;			30 —		-		
				31 —		1		
				32		1		
				-		1		
				33		1		
				34 —		1		
				35 —		-		
				36			·	
				-		1		
				37—]		
				38		1		
				39 —	- -			
				40				

•