					-		. 11	/18/98			EXPLOR/	ATION	N LOG			
					s	TART DATE	11	/18/08								SHEET 1 OF 1
					EI	ND DATE		10/90	Eroowov E	vtonci	n Project			STATION	33+28 "SI	N"
					JC	DB DESCRI	PTION	<u>1-000</u>		xtensi	on Project			OFFSET	55.43 RT	
	2m				LC	OCATION		asnoe (Jounty, Nev	ada				ENGINEER	Acker	
	1 MM	J.	5		B	ORING	01	3+20						EQUIPMENT	Peterson	
	Ą		57		E.	A. #	00	79-01-8	5				LEVEL	DRILLING		
	Ĭe				G	ROUND EL	EV15	41.64 (m)		11/18/98 C).76	1540.9	METHOD	Auger	
			\mathbf{v}		H	AMMER DR	OP SYS	STEM _ F	Rope - Cathe	ead				BACKFILLED	Yes D	ATE <u>11/18/1998</u>
ľ	ELEV.	DE	PTH	SAI	MPLE	BLOW C	OUNT	Percent		USCS		МАТЕ				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group	10/-				a a ta al	Dulla comple
		+	0.00	1A	SPT	4	9		w, PI, Sv		10-2	20% ve	e, grey Silty ery slightly i	blastic fines, 80-	nated 85% fine	taken from 0 -
		-	0.46			5				-	to c	coarse s	sand, 0-5%	fine gravel.		1.5 meters.
	-	Ψ.														
	1540.64	_ 1														
	1010101	- ·														
		+	1.52													
		-		10	ерт	2	7			em.						
	4500.04		1.98	ю	371	4			W, PI, 3V	SIVI						
	1539.64	[2														
		-														
		-														
		+	0.05													
	1538.64	-3	3.05			3				-						
			2 5 1	1C	SPT	4	9		w, PI, Sv		2.51					
		-	3.51			5					3.51					
		-														
	1537.64	+4														
		F														
		+														
	1536.64	+5														
		-														
		Ľ														
	1535.64	+6														
		+														
		-														
	1534.64	— 7														
		+														
		-														
0		-														
5/11/	4500.04	-														
DT	1533.64	– 8														
DT.C		F														
N N		+														
L L L L L		+														
15D.C	1532.64	 9														
0620		F														
7T 0(+														
		+														
zl					1	1			1	1	1					

							11	/10/09			EXPLORATION LOG			
					S	TART DATE	<u> </u>	/19/90						SHEET 1 OF 1
					EI	ND DATE		19/98	 		n Drainat	STATION	34+66 "SI	N"
		/			JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	<u>141.48 R</u>	
	. In				LC	OCATION		ashoe	County, Nev	ada		ENGINEER	Advar	
	2MM	to the	5		B	ORING	01	4+50				EQUIPMENT	Peterson	
	The second se		<1		E.	A. #	00)79-01-	5		GROUNDWATER LEVEL		1 6(613011	
	Že	1			G	ROUND EL	EV15	541.33 (m)		11/19/98 0.00 1541.3	METHOD	Auger	
			\mathcal{T}	1	H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead		BACKFILLED	_YesD	ATE11/20/1998
	ELEV.	DE	PTH	SAI		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	<u>¥ (</u>	(m) 0.00	NO.		Increments 2	<u>300 mm</u>	Recov'd		Gioup	Wet, loose, dark grey	Silty Sand with	1	Bulk sample
		-	0.46	1A	SPT	1	2		w, PI, Sv		estimated 20% non-p	plastic fines, 80%	% fine to	taken from 0 -
			0.40			1				-	coarse sanu.			1.5 meters.
		-												
	1540.33	+1												
		-												
		-	1.52			0								
				1B	SPT	3	6		w, PI, Sv	SIVI				
	1539.33	-2	1.98			3				_				
		-												
		-												
		-												
	1520.22	Ŀ,	3.05											
	1556.55					1	_				3.20			
		-	3.51	1C	SPT	2	5		w, PI, Sv	SC	Wet, soft, light brown 3.51 estimated 40% medi	Clayey Sand w um plastic fines.	ith 60% fine	
		-									to medium sand.			
		-												
	1537.33	-4												
		-												
		-												
	1536.33	-5												
		-												
	1535.33	+6												
		-												
		-												
	1534.33	+7												
		-												
		-												
/01														
5/11	1533 33	8												
GDT	1000.00	Ļ												
DOT.		F												
N		+												
GPJ	4500.00	F _												
15D.	1532.33	Τ9												
0620		F												
0T 0		+												
∩_ ≥		F												
2				1	1	1	1	1	1	1	1			1

							11	/18/08			EXPLORATION LOG		
					S	TART DATI	11	1/10/90					SHEET 1 OF
					EI	ND DATE		1/10/90		vtonoi	on Drojaat	STATION	1+63 "SN"
		/			JC	OB DESCR	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	1.44 LI
	. Sry				LC	OCATION		asnoe	County, Nev	ada		ENGINEER	G
	-2MM	S	5		B	ORING	01	4+80			[]	EQUIPMENT A	eterson
	Ä		<1		E.	.A. #	00)79-01-	5		GROUNDWATER LEVEL		
	and and a				G	ROUND EL	EV15	544.39 (m)		DATE DEPTH m ELEV. m 11/18/98 0.00 1544.4	METHOD	uger
			77)	6	H	AMMER DF	ROP SYS	STEM	Rope - Cathe	ead_		BACKFILLED Y	esDATE11/18/199
	ELEV. (m)		PTH m)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DI	ESCRIPTION	REMARKS
		Ļ	0.00	1Δ	SPT	1	5		w PL Sv		Wet, loose, grey Silt	y Sand with 10% ver	ry Bulk sample
		-	0.46			3			,,.	_	Minor fine gravel.		1.5 meters.
		-											
	. =	F.								SM			
	1543.39	<u>_</u> 1											
			4 50										
		-	1.52			1				_			
		+	1 09	1B	SPT	2	5		w, PI, Sv		1.83	City Canal with OF	24 January
	1542.39	-2	1.90			3				-	plastic fines, 75% fin	e to coarse sand.	% IOW
		F											
	1541.39	<u>—</u> 3	3.05							SM			
		-		10	SPT	2	5		W PL SV				
			3.51	10		2			w, i i, ov				
		-											
	4540.00	F.									3.96		
	1540.39	– 4									Wet, medium dense,	light brown Silty Sa	nd
											sand.		Uaise
		-	4.57			4				SM			
		-		1D	SPT	10	20		w, PI, Sv				
	1539.39	-5	5.03			10					5.03		
		F											
		F											
	1538.39	+6											
		-											
		-											
		-											
		-											
	1537.39	+7											
11/01		-											
T 5/;	1536.39	+8											
.GD.		F											
Бď		F											
Š		F											
GPJ	1525 20	Į,											
115D.	1000.09	-9											
0620		F											
0 T 0		F											
Ŭ N		-											
ź				1		1		1					

							. s/	26/98			EXPLORATION LOG			
					S		<u> </u>	26/08					45.00 -00	SHEET 1 OF 1
)		El	ND DATE	0/.	20/90		vtonci	n Broiget	STATION _	15+28 "SS	5"
					JC	DB DESCRI	PTION	1-560		xtensi		OFFSET _	283.60 LT	
	54				LC	OCATION			Jounty, Ne	ada		ENGINEER _	Acker	
	2 Mm	e la	6		B	ORING	01	5+50				EQUIPMENT _	Peterson	
	Z.				E.	A. #	00	079-01-)			DRILLING		
	He.				G	ROUND EL	EV15	56.13 (m)		8/26/98 3.66 1552.5	METHOD _	Auger	
				1	H	AMMER DR	OP SYS	STEM_F	Rope - Cath	ead		BACKFILLED _	Yes D/	ATE 8/26/1998
	ELEV. (m)	DEF (n	PTH n)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DES	SCRIPTION		REMARKS
		-	0.00	2A	SPT	23	7		w, PI, Sv		Slightly moist to moist, dense, brown grev Silty	loose to mediun v Sand with esti	m imated	Bulk sample taken at
		-	0.46			4	-		,,	-	10-20% non-plastic fine	es, 80-85% fine	to coarse	0.0-1.52 meters.
		-									sand, 5% fine gravel.			
	4555 40													
	1555.13									SM				
			1 5 2											
		-	1.52			4				1				
		+	1 08	2B	SPT	6	12		w, PI, Sv					
	1554.13	-2	1.30			0					2.13			
		-									Granitic boulder.			
											2 90			
	1553.13	<u>_3</u>	3.05								Moist, dense, light brov	wn Silty Sand w	ith large	
		+		20	SPT	4	28			SM	gravel, cobbles and bo	ulders.		
		-	3.51	20		21	20				Moist to wet, medium d	dense, grey brow	wn Silty	
	-	¥									Sand with estimated 15	5-20% non-plas	tic fines,	
	1550.40	F .										i sanu.		
	1552.13	4								SM				
		L								5141				
		-	4.57			3				-				
		-		2D	SPT	7	14							
	1551.13	-5-	5.03			7					5.03			
		-												
		-												
	1550.13	-6												
		-												
		+												
		-												
		-												
	1549.13	+7												
1/01		F												
T 5/1	1548.13	+8												
GD		F												
DOT		\vdash												
N		F												
GPJ	1547 40	Ĺ												
15D.	1047.13	L.a												
0670		L												
0 TC		F												
		+												
ź														

						/۵	1/00			EXPL	ORATION	N LOG			
				ST	ART DATE	<u> </u>	1/99								SHEET 1 OF 1
				El	ND DATE	9/	1/99	 					STATION	35+81 "SN	
				JC	B DESCRI	PTION	<u>1-000</u>		xtensic	n Projec	л		OFFSET	28.48 KI	
	100			LC	OCATION		asnoe (Jounty, Nev	ada				ENGINEER		
	2Wm	e s		BC	ORING	01	5+81 (L	JB-01) -	[EQUIPMENT	-	
	Ą			E.	A. #	00	079-01-5)		GROU					
	Ze			GI	ROUND EL	EV15	47.53 (m)		9/1/99	NE	ELEV. M	METHOD	Trackhoe	
			1	HA	AMMER DR	OP SYS	STEM	IA	[BACKFILLED	_YesDA	TE 11/12/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	ESCRIPTION		REMARKS
		_							OL	0.15	Moist, loos	se, dark bro	own Sandy Orga	anic Clay	
		- 0.46 _ 0.61	1A	GRAB					SM	0.46	50% fine t	to coarse s w grasses.	and. Contains h	high density	
		- 0.91	1B	GRAB				PI, Sv			Wet, loose	e, dark brov	wn Silty Sand w	ith fine to	
	1546.53	-1							SM		coarse sa	nd, and 10	% fine subround	led gravel.	
		-								1 37	High mica	content pr	obably from wea	athered	
		- 1.52	2							1.07	Wet, loose	e, dark brov	wn, Silty Sand w	vith 15%	
		- 1.83	1C	GRAB				PI, Sv	SM	1.83	non-plasti 4% subrou	c fines, 819 unded to su	% fine to coarse	sand, and	
	1545.53	-2									mica conte	ent probabl	y from weather	ed granitics.	
		-									with 25%	e, blue-gree low plastici	en to brown Silty ty fines, 73% fin	e to coarse	
		-									sand, and	2% fine gr	avel. high mica	content	
		-									Easily exc	avated with	nout difficulty, ex	cept for	
	1544 52	1.2									caving pro	blems due	to high water ta	able. Area	
	1044.05	3									30113 0000	Shea by ha			
		-													
		-													
		-													
	1543.53	-4													
		_													
		-													
		-													
	1542.53	-5													
		Ľ													
		-													
	1541.53	-6													
		-													
	1540.53	-7													
		-													
		-													
/01															
5/11	1539 53	— 8													
GDT	1000.00	Ļ													
DOT.		-													
N		F													
GPJ	1520 50	Ĺ													
15D.	1038.53	Га													
06700		F													
OT C		F													

							0/	04/00			EXPLORATION LOG			
					ST	FART DATE	=	24/98						SHEET 1 OF 2
					E١	ND DATE	8/.	24/98	 		n Draia at	STATION	15+83 "S	S"
					JC	DB DESCR	IPTION	1-580	Freeway E	xtensio	on Project	OFFSET	23.58 L1	
	54				LC	OCATION		ashoe	County, Nev	ada		ENGINEER	Ackor	
	2 WM	6			BC	ORING	01	6+00				EQUIPMENT	Peterson	
	Į Į				E.	A. #	0	079-01-8	D					
	Ĩ.	~			GI	ROUND EL	.EV15	50.05 (m)		8/24/98 1.52 1548.5	METHOD	Auger / R	otary Mud
					HA	AMMER DF	ROP SYS	STEM	Rope - Cathe	ead		BACKFILLED	_Yes D	ATE <u>8/24/1998</u>
	ELEV. (m)	DEP1 (m)	ГН)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0	0.00	2A	SPT	5	10				Slightly moist, medium	n dense, dark g astic fines 80°	grey Silty % fine to	
		- 0	.46			5				_	coarse sand. Grass m	att to 0.15 met	ters.	
		-												
	1540.05													
	1549.05	Γ'								SM				
	7	1	.52											
	-	<u>* </u>				3	1.0			-				
		- 1	.98	2B	SPT	5	10		w, PI, Sv					
	1548.05 ·	-2									2.13		• • • •	
											20% non-plastic fines.	80% fine to co	Sand with barse sand.	
		-												
		-												
	1547.05	<u>-3 3</u>	8.05			5				-				
			E 4	2C	SPT	10	23							
		-	5.51			13				-				
		-												
	1546.05 ·	-4												
		-												
		4	.57							_				
		-		2D	SPT	13	27		w, PI, Sv					3" OD sampler used.
	1545.05	-5 ⁵	5.03			14				SM				
		+												
		-												
	1544.05 ·	-6 6	5.10											
		-	. 40	2E	SPT	17	50/127			1				
		0	0.40			50/127				-				
		-												
	1543.05	-7												
	101010	+ .												
		-												
01			.62			17				-	Gravel to 1.3 cm.			
5/11/	1542.05	o	00	2F	SPT	26	54				7.92	abt and Deed		
5DT	1542.05	- 0 0	0.00			20				-	Sand with estimated 5	ignt grey Poor % non-plastic	fines,	
D.TOC		F									95% fine to coarse sa	nd.		
N		F												Switch from
- L95										SP				auger to rotary mud.
15D.(1541.05 ·	9 9	.14			4								
0670		F		2G	SPT	4 9	27		w, PI, Sv					
0 TC		9	.60			18				-				
D Z		F									9.91			
z		1				1	1	1	1	1	1			1

						Q /*	21/02			EXPLORATION LOG		
				S	TART DATE	<u> </u>	24/30					SHEET 2 OF 2
				El	ND DATE	8/.	24/90	Ereoway 5	vtoncio	n Project	STATION	S"
				JC	DB DESCRI	PTION	000-i				OFFSET 23.58 LT	
	24			LC	DCATION		asriue (Journey, INE	aua			
	2 Mr. N			B	ORING		0+00	-	r		Peterson	
	Z.			E.	A. #		079-01-5	, ,			DRILLING	
	2u			G	ROUND EL	EV15	50.05 (m)	<u> </u>	8/24/98 1.52 1548.5	METHODAuger / R	totary Mud
				H	AMMER DR	OP SYS	STEM	Rope - Cath	ead		BACKFILLED Yes	DATE <u>8/24/1998</u>
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION	REMARKS
		_								Wet, dense, light brow non-plastic fines, 80%	wn Silty Sand with 20% 6 fine to medium sand.	
		-										
		- 10.67			4				-			
	1539.05 -	-11, 10	2H	SPT	11	32						
	1000100	-			21				-			
		-										
		F										
	1529.05	- 12										
	1556.05	12.19							SM			
		-	21	SPT	15 16	37						
		_ 12.65			21				-			
		-										
	1537.05 -	-13										
		_										
		13.72										
		-		ODT	17	F7			1			
	1536.05 -	14 14.17	ZJ	501	26 31	57		W, PI, SV				
										14 48		
		_								Wet, soft, grey Sandy	Clay with estimated	Clay observed
		-							CL	60% low to medium p sand.	blastic fines, 40% very fine	on drill bit.
	1535.05 -	+15 15 24								15.09	composed Granitic	_
		15.39	2K	SPT	50/102	50/102				boulder.	composed Granitic	3" OD sampler
		_										used.
		-										
	1534.05 -	- 16								16.15		
		Ľ								Wet, very dense, ligh	t brown Silty Sand with	
		-								medium sand. Minor	coarser sand.	
		16.76			26				1			
	1533.05 -	+17	2L	SPT	31	67		w, PI, SV, Sh				
									1			
		F							SM			
11/01		F										
Л 5/	1532.05	-18										
T.GD		- 18.29			10				-			
/_D0		Ľ	2M	SPT	25	65						
N ار		18.75			40					18.75		-
D.GF	1531.05 -	- 19										
9015		+										
- 007		Ľ										
DOT		Ĺ										
N												

SHET 1 OF SHET 1 OF BED DATE CENT 001 SHET 1 OF STATION List 011 STATION SHET 1 OF DO DESCRIPTION Mark 10.81 CENT 001 015-25 STATION CENT 001-015-25 COLSPANS OPEND 015-25 COLSPANS						-		Q/'	24/98			EXPLO	ORATIO	N LOG			
LED UAIE LED UAIE LED VAIE STATION Use DESCRIPTION STATION LED VIEW STATION Use DESCRIPTION Station USE DESCRIPTION </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>S</td> <td>TART DATE</td> <td>= <u>-0//</u> </td> <td>24/08</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>40 44 "</td> <td>SHEET 1 OF 2</td>						S	TART DATE	= <u>-0//</u> 	24/08							40 44 "	SHEET 1 OF 2
Bit Space Dot Description Proof Treption Offsate Construction Construction <td></td> <td></td> <td></td> <td></td> <td></td> <td>El</td> <td>ND DATE</td> <td>0/.</td> <td>1 5 90</td> <td></td> <td>vtonci</td> <td>n Proioc</td> <td>~+</td> <td></td> <td>STATION</td> <td>16+11 "</td> <td>SN"</td>						El	ND DATE	0/.	1 5 90		vtonci	n Proioc	~+		STATION	16+11 "	SN"
Lock Tick Other above Output Solution Control			/			JC	DB DESCRI	PTION	1-000		xtensit	ITFIOJEC	1		OFFSET	12.61 L MG	<u> </u>
DORING UDP740 Common Second S		200				LC	DCATION	01	asilue (county, Nev	aua				ENGINEER	Acker	
EA.# COUNDELLEY. 1548.99 (n): HAMMER DROP SYSTEM DUPLY Display Display <thdisplay< th=""> <thdisplay< th=""> <thdis< td=""><td></td><td>2 Mar</td><td></td><td></td><td></td><td>B</td><td>ORING</td><td></td><td>0+20</td><td></td><td></td><td>00011</td><td></td><td></td><td></td><td>Peterso</td><td>n</td></thdis<></thdisplay<></thdisplay<>		2 Mar				B	ORING		0+20			00011				Peterso	n
SRUMP ELEV. DBM bits		The second se	X			E.	A. #		19-01-	0 /)				ELEVEL	DRILLING	A	
HAMMER CROP SYSTEM. Rope - Late and the second late in the second		l.				G	ROUND EL	EV15	49.99 (<u>m)</u>	<u> </u>	8/24/98	1.52	1548.5	METHOD	Auger	
E.V. DEFTH SMPLIE B.COVECUNT Booms Source Source booms Records LAB TESTS USES MATERIAL DESCRIPTION REMARKS 100 14 SPT 5 11 w, PI, Sv SM Dry, loss, light brow Sity Sand with grass metrics. Bits sample that to 15 meters. Dry, loss, light brow Sity Gravely Sand with 15% non-plastic fines, 75% fine to coarse sand, 10% fine gravel. Bits sample that to 15 meters. Bits sample that sample that sample from 2.5 meters. Bits sample that sample from 2.5 meters. Bits sample that sample from 2.5 meters. Bits sample that sample that sample from 2.5 meters. Bits sample that sample from 2.5 meters. Bits sample that sample from 2.5 meters. Bits sample from 2.5 meters. <td< td=""><td></td><td></td><td></td><td></td><td>N</td><td>H</td><td>AMMER DR</td><td>OP SYS</td><td>БТЕМ</td><td>Rope - Cath</td><td>ead</td><td></td><td></td><td></td><td>BACKFILLED</td><td>Yes</td><td>DATE 8/24/1998</td></td<>					N	H	AMMER DR	OP SYS	БТЕМ	Rope - Cath	ead				BACKFILLED	Yes	DATE 8/24/1998
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	i de			G	ROUND EL	_ _{EV.} _15	649.99 (m)		DATE DEPTH m ELEV. m DRILLING Auger	
			1	н	AMMER DF	ROP SYS	STEM_R	Rope - Cath	ead	BACKFILLED Yes DA	TE 8/24/1998
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		- 10.67	,						-		
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		_									
		+								11.89	
	1537.99	+12								Wet, very dense, light reddish brown Silty	
		12.18	,		19				-	85% fine to medium sand.	
		- 12.65	11	SPT	38	50/102					
		_ 12.00			50/102				-		
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	1000.00	-							SM		
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		-	11	SPT	15	66		W PL SV		Color change to rust brown with larger sand	
	1535.99		, 10		37	00		w, i i, ov		5120.	
										14 48	
		_								Wet, very dense, light brown Silty Sand with	
		-								estimated 20% non-plastic fines, 80% fine to	
	1534.99	-15								granitic boulders.	
		_ 15.24) 1K	SPT	50	50			-	Granitic boulder 0.8 meter diameter.	
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)			H	AMMER DF	ROP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_Yes	DATE <u>11/19/1998</u>
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	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group			e ve al ith	Dulle comple
		$\overline{\mathbf{A}}$	0.00	ЗA	SPT	2	5		w, PI, Sv		estimated 15-20% nc	on-plastic fines,	80-85%	taken from 0 -
		-	0.46			3				-	fine to medium plasti	c fines. Very loc	ose with	1.5 meters.
		_									Signity plastic lines a			
	1542 83	1								SM				
	10 12:00	-												
		-	1.52											
		-		20	ерт	1	2		W DI SV	1				
	1511 02		1.98	30	351	2	3		W, FI, 3V		1.98			
	1041.03	T2									Wet, medium dense,	grey Silty Sand	1 with % fine to	
		-									coarse sand.			
		-												
		-	2.05							SM				
	1540.83	-3	3.05			3				1				
			3 51	3C	SPT	5	10		w, PI, Sv		3 51			
		-	0.01								0.01			-
		-												
	1539.83	-4												
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	1538.83	+5												
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END DATE Biol Processory Mashes County, Nevada STATION StATION StATION StATION MAGE LOD DATE Organization Organization Mashes County, Nevada Enclose County, Nevada Enclose County, Nevada					S	FART DATE	<u> </u>	20/90 26/00						SHEET 1 OF 3
Location Washed County, Nevada Offset Mdf Location 0078-01.5 County, Nevada FourMentry Acker GROUND ELV, 1549.56 (m) GROUNDWATER LEVEL DATE DEPTH IN ELVEL Posterion Posterion HAMMER DROP SYSTEM ROP-Cathed MATERIAL DESCRIPTION Recompower Posterion					El	ND DATE	_8/.	20/90	Eroower 5	vtona	n Project	STATION	36+35 "SN	N"
EXAMPLE EVANCE Model BORNO DELV 078-01-5 00000 016-60 00000 016-60 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 000000 000000 000000 0000000 0000000 0000000 0000000 00000000 0000000000 000000000000 000000000000000000000000000000000000					JC	DB DESCRI	PTION	1-580		xtensic	on Project	OFFSET	28.94 RT	
BORING UDH-30 EA.# EA.# OTH-30 0075-01-5 GROUND/LEX. EQUIMMENT Collement Lex. Collement Lex. <thcollement Lex. Collement Lex.</thcollement 		34			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
EA.# OT79-01-5 (ROUND FER_U_1549.65 (m)) HAMMER DROP SYSTEM_ROPE - Cathead Column FER_UFUE DATE_DEPTH (EUV. 2009 OFFER I MLMS Image: Cathead Column FER UPV. 2009 Column FER UPV. 2009 Column FER UPV. 2009 Colu		1 Mr	6		B	ORING	01	6+50				EQUIPMENT	Peterson	
BROWND ELEV. 1548 56 (m) Date Description Date Description Description <thdescription< th=""> Description <thdescript< td=""><td></td><td>I.</td><td></td><td></td><td>E.</td><td>A. #</td><td>00</td><td>079-01-8</td><td>5</td><td></td><td>GROUNDWATER LEVEL</td><td>OPERATOR</td><td>1 6(613011</td><td></td></thdescript<></thdescription<>		I.			E.	A. #	00	079-01-8	5		GROUNDWATER LEVEL	OPERATOR	1 6(613011	
Item Description Description <thdescription< th=""> <thde< td=""><td></td><td>ž.</td><td></td><td></td><td>G</td><td>ROUND EL</td><td>EV15</td><td>549.56 (</td><td>m)</td><td></td><td>DATE DEPTH m ELEV. m 8/25/98 1.07 1548.5</td><td>METHOD</td><td>Rotary Mu</td><td>ıd</td></thde<></thdescription<>		ž.			G	ROUND EL	EV15	549.56 (m)		DATE DEPTH m ELEV. m 8/25/98 1.07 1548.5	METHOD	Rotary Mu	ıd
EEV. 0 Deprint (m) Reserve (m) LAB TESTS (m) USA (m) Description (m) MATERIAL DESCRIPTION (m) Remarks 0.000 0.040 34 SPT 10 22 w, PI, Sv (m) SM SM Signty most, medium dense, duk gray non-plastic fines, 80% fine to coarse sand. 0.01 Signty most, medium dense, duk gray non-plastic fines, 80% fine to coarse sand. 0.01 Signty most, medium dense, light brown Sity Sand with location dense, light brown Sity Sand with coarse sand, 5% fine gravel. Signty most, medium dense, light brown Sity Sand with location dense, light brown Sity Sand with location dense, light brown Sity Sand with location dense, light brown Sity Sand with estimated 02% fine to coarse sand, 5% fine to coarse sand. 3'' OD sampler 1545.66 4 112 2'' W, PI, Sv 3.05 SM SM 1545.66 4 112 2'' W, PI, Sv 4.22 SM SM SM 1545.66 4 112 2'' W, PI, Sv 4.22 SM SM SM 1545.66 4 112 2'' W, PI, Sv 5.63 SM SM SM SM 1545.66 4 112 12'' W,					H	AMMER DR	OP SYS	STEM_F	Rope - Cathe	ead		BACKFILLED	_YesD	ATE <u>8/26/1998</u>
Oracle and solution (below) SM SM <t< td=""><td></td><td>ELEV.</td><td>DEPTH</td><td>SA NO.</td><td>MPLE TYPE</td><td>BLOW CO</td><td>OUNT Last</td><td>Percent</td><td>LAB TESTS</td><td>USCS Group</td><td>MATERIAL DE</td><td>SCRIPTION</td><td></td><td>REMARKS</td></t<>		ELEV.	DEPTH	SA NO.	MPLE TYPE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
out out <thout< th=""> <thout< th=""> <thout< th=""></thout<></thout<></thout<>		(,	0.00		0.07	4	<u>500 mm</u>	Recovid			Slightly moist, mediu	m dense, dark g	rey	
0.61 0.61 0.61 0.63 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64 <th0.64< th=""> 0.64 0.64 <th0< td=""><td></td><td></td><td>- 0.46</td><td>ЗA</td><td>501</td><td>10</td><td>22</td><td></td><td>W, PI, SV</td><td>SM</td><td>non-plastic fines. 80%</td><td>6 fine to coarse</td><td>sand.</td><td></td></th0<></th0.64<>			- 0.46	ЗA	501	10	22		W, PI, SV	SM	non-plastic fines. 80%	6 fine to coarse	sand.	
1543.65 -1 -1 -3 -6 w, Pl. Sv. St. 1543.65 -1 -1 -3 -6 w, Pl. Sv. St.			0.61			2					0.61 Grass matt to 0.15 m	eters.	-	
1543.56 U1 107 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <t< td=""><td></td><td></td><td>-</td><td>3B</td><td>SPT</td><td>3</td><td>6</td><td></td><td>w, PI, Sv,</td><td></td><td>estimated 15% non-p</td><td>lastic fines, 80%</td><td>6 fine to</td><td></td></t<>			-	3B	SPT	3	6		w, PI, Sv,		estimated 15% non-p	lastic fines, 80%	6 fine to	
Instruction		1548.56	$\frac{1}{107}$			3			511	_	coarse sand, 5% fine	gravel.		
Instruction Instruction SM SM 1547.56 2 30 SPT 2 4 w, PI, Sv 1547.56 2 305 F 2 5 w, PI, Sv 1547.56 2 305 F 2 5 w, PI, Sv 1545.56 3.365 F 2 5 w, PI, Sv 3.861 F 2 5 w, PI, Sv 3.861 F 2 2 5 w, PI, Sv 3.861 F 12 24 w, PI, Sv 305 4 4.11 F F 12 24 w, PI, Sv 4.84 SPT 7 17 w, PI, Sv SM SM 4.94 1544.56 6 6 5.13 SPT 9 19 w, PI, Sv SM 1543.56 G 6.51 SM SM SM SM SM SM 1543.56 G 6.53			1.22			2				-				
1547:56 1 383 3 3 2 4 w, Pl, Sv 1547:56 2 30 SPT 2 4 w, Pl, Sv 3.05 Color change to brown. 3.05 1546:56 3 305 6 3 9 23 w, Pl, Sv 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3			1.69	3C	SPT	3	6							
Sum Sum <td></td> <td></td> <td>1.83</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>SW</td> <td></td> <td></td> <td></td> <td></td>			1.83			3				SW				
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Image: constraint of the second constraint of th			- 2.29	30	351	2	4		W, FI, 3V					
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Step Set 5 Set 7 9 23 w, Pl, Sv 1545.6 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td></td> <td>454050</td> <td>- 2.90</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>-</td> <td>3.05</td> <td></td> <td></td> <td></td>		454050	- 2.90			3				-	3.05			
Jost of the standard 15-25% non-plastic fines, result of the st		1546.56	3 0.00			6					Wet, medium dense,	light brown Silt	/ Sand	3" OD sampler
SM SM 1545.56 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,11 -4,1			- 3.51	3F	SPT	9	23		w, PI, Sv		with estimated 15-25	% non-plastic fi	nes,	used.
1545.56 4 4.11 3G SPT 12 24 w, PI, Sv SM 1545.56 4 4.11 3G SPT 12 24 w, PI, Sv 4.94 1545.66 4 4.11 0 17 w, PI, Sv 4.94 1545.66 5 3I SPT 6 19 w, PI, Sv 4.94 1545.66 5 3I SPT 6 19 w, PI, Sv SC 5.15 Wet, medium dense, brown Clayey Sand with estimated 30% low plastic fines, 70% fine so coarse so			- 3.66			17					sand and gravel.	in sand. Minor	Juaisei	
1545.56 -4 4.11 -11 -12 -24 -11, 100 SM 1545.56 -4 -4.11 -4.22 -1 -4.22 -4.22 -4.23 -4.24 1544.56 -5 31 SPT 7 17 -4.72 -4.22 -4.24 1544.56 -5 31 SPT 9 19 w, PI, Sv -4.24 1543.56 -5 31 SPT 10 21 w, PI, Sv 1543.56 -6 6 -0 -0 -5.34 11 21 w, PI, Sv -30 1542.56 -7 7.16 32 w, PI, Sv 1542.56 -7 7.16 32 w, PI, Sv 1542.56 -7 7.16 32 w, PI, Sv 1541.56 -8 9 -0 -0 1541.56 -7 -11 32 w, PI, Sv 1541.56 -8 9 -0 -0 -9 -0 -0 -0 -1541.56 -7 -11 32 w, PI, Sv -6.57 -0 -0 -0 -1541.56 -7 -0 -0 -1542.56 -7			-	30	SDT	8	24							
1541.56 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td></td> <td>1545.56</td> <td>4 4.11</td> <td>50</td> <td></td> <td>12</td> <td>24</td> <td></td> <td>w, i i, ov</td> <td>SM</td> <td></td> <td></td> <td></td> <td></td>		1545.56	4 4.11	50		12	24		w, i i, ov	SM				
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1544.56 4.72 10 4.94 1544.56 -5 31 SPT 9 19 w, PI, Sv 5.49 - - - - - - - 1543.56 -5 31 SPT 6 - - - - - 1543.56 -6 6.10 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -				ЗH	SPT	7	17		w, PI, Sv					
1544.56 -5 3I SPT 9 19 w, PI, Sv 5.33 -5.33 -10			4.72			10				-	4.04			
1543.56 3 SPT 19 w, Pl, Sv SM 1543.56 -5.49 - - - - - Wet, medium dense to dense, grey brown Sily Sand with estimated 13% silphtly plastic fines, 85% fine to coarse sand. Minor gravel to 1.3 cm. 1543.56 -6 6.10 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td></td> <td>1544.56</td> <td>-5</td> <td>~</td> <td></td> <td>6</td> <td></td> <td></td> <td></td> <td>SC</td> <td>4.94</td> <td>brown Clavev S</td> <td>and with</td> <td></td>		1544.56	-5	~		6				SC	4.94	brown Clavev S	and with	
5.49 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -			5.33	31	SPI	9	19		w, PI, Sv		s.15 estimated 30% low p	lastic fines, 70%	fine sand.	
Interview Sum S			- 5.49								Silty Sand with estim	to dense, grey b ated 15% slight	rown ly plastic	
Total Sec 5.94 11 11 1543.56 6.610 - - - 3K SPT 15 - 3K SPT 15 - 6.6.71 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <t< td=""><td></td><td></td><td>-</td><td>ЗJ</td><td>SPT</td><td>10</td><td>21</td><td></td><td>w, PI, Sv</td><td></td><td>fines, 85% fine to coa</td><td>arse sand. Mino</td><td>gravel to</td><td></td></t<>			-	ЗJ	SPT	10	21		w, PI, Sv		fines, 85% fine to coa	arse sand. Mino	gravel to	
1543.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td></td> <td>15/3 56</td> <td>5.94 6 6 10</td> <td></td> <td></td> <td>11</td> <td></td> <td></td> <td></td> <td>_</td> <td>1.3 Cm.</td> <td></td> <td></td> <td></td>		15/3 56	5.94 6 6 10			11				_	1.3 Cm.			
Image: Normal basis Image: Signed stress stres		1040.00	- 0 0.10			9				-				
Offer Output Output </td <td></td> <td></td> <td>6 55</td> <td>ЗK</td> <td>SPT</td> <td>15</td> <td>30</td> <td></td> <td>w, PI, Sv</td> <td></td> <td></td> <td></td> <td></td> <td></td>			6 55	ЗK	SPT	15	30		w, PI, Sv					
1542.56 -7 3L SPT 11 32 w, Pl, Sv 1542.56 -7 7.16 3L SPT 11 32 w, Pl, Sv 1541.56 -7 -7.92 - - - - 1541.56 -8 3M SPT 20 47 w, Pl, Sv 1541.56 -8.38 3M SPT 20 47 w, Pl, Sv 1540.56 -9 9.14 - - - 1540.56 -9 9.14 - - - 1540.56 -9 9.14 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <			6.71			15								
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OPUS OPUS <th< td=""><td></td><td>1542.56</td><td>7 7.16</td><td></td><td></td><td>21</td><td>02</td><td></td><td>w, i i, ov</td><td></td><td></td><td></td><td></td><td></td></th<>		1542.56	7 7.16			21	02		w, i i, ov					
Total 56														
1541.56 -7.92 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td< td=""><td>_</td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	_		_											
1541.56 8 3M SPT 20 20 27 47 w, PI, Sv 1540.56 8.38 3M SPT 20 27 47 w, PI, Sv 1540.56 9 9.14 - - 8.38 - - - - 8.38 - - - - 8.38 - - - - - 8.38 - - - - - 8.38 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	11/01		7.92											
Interface Inter	Τ 5/	1541.56	-8			9				-				
Org Org Org Org 1540.56 9 9.14 - - - 3N SPT 26 - 37	T.GD		8.38	ЗM	SPT	20 27	47		w, PI, Sv		8.38			
1540.56 9 9.14 9 9.14 9 9.14 9 9.14	2										Wet, very dense, ligh	t grey brown Sil	ty Sand	
1540.56 -9 9.14 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	N										with estimated 15% v 80% fine to coarse sa	ery slightly plas	tic fines, vel.	
9.14 21 3N SPT 26 9.60 37	,GP,	1540.56	-9											
No. No. SPT 26 63 w, PI, Sv 9.60 37 37 37 37	015C		9.14			21				-				
	0079		-	ЗN	SPT	26	63		w, PI, Sv					
	ЮŢ		9.00			51				-				

						o /•	05/00			EXPLORATION LOG	
				S	FART DATE	<u> </u>	20/90				SHEET 2 OF 3
				El	ND DATE	8/.	20/98	 		STATION <u>36+35 "SN</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Project OFFSET 28.94 RT	
				LC	OCATION		ashoe (County, Nev	ada	ENGINEER	
	2MM	e La		B	ORING	01	6+50			EQUIPMENT Acker	
	Ä			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL OPERATOR TELEVISION	
	Ž			G	ROUND EL	EV15	649.56 (m)		8/25/98 1.07 1548.5 METHOD Rotary Mud	d
				H	AMMER DR	ROP SYS	STEM_R	Rope - Cathe	ead	BACKFILLED Yes DA	TE 8/26/1998
	ELEV.	DEPTH	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
	()				Increments	500 1111	IXECOV U				
		_									
		- 10.67									
		-	30	SPT	9 25	51		w. Pl. Sv	SM		
	1538.56 -	-11 _{11.13}			26			, , -	-		
		_									
		_									
		-									
	1537.56 -	-12 12 19									
					24				-		
		12.65	3P	SPI	28	58		w, PI, Sv			
		_							1		
	1536.56 -	-13								13.11	
		-							CI	Sandy Clay lense.	
		-								13.56	
		- 13.72			49				-	Wet, very dense, light grey Poorly Graded	
	1535.56 -	-14 ^{14.02}	3Q	SPT	50/127	50/127		w, PI, Sv		85% fine to coarse sand, 10% fine to medium	
		-								gravel. Decomposed granitic cobbles and boulders.	
		-									
		-									
	1534.56	- 15							SP		
	1001.00	_ 15.24									
		15.39	3R	SPT	50/102	50/102		w, PI, Sv	-	Large degraded boulder.	
		-									
	4500 50	-									
	1033.00 -	<u>о</u> і								16.15	
		-								estimated 15-20% non-plastic fines, 80-85%	
		16.76								fine to coarse sand. Minor gravel.	
	1500	-	3S	SPT	30	50/102		w, PI, Sv	1	Degraded cobbles and boulders with few	
	1532.56 -	<u> </u>			50/102			, ,	-	competent gravels to 2 cm.	
		Ļ									
÷		-									
/11/0		-									
DT 5	1531.56 -	- 18									
DT.G		- 18.29 _ 18.44	3T	SPT	50/102	50/102		w. Pl. Sv	-		Soft zone encountered -
Z_D		-						, ,	1		possible clay
Z C		F							SM		thick.
5D.G	1530.56 -	- 19									
7901		-									
T 00		Ľ									
DO		19.81							1		
≥					31						

ĺ						8/	25/08			EXPL	ORATIO	N LOG			
				S	TART DATE	<u> </u>	25/90								SHEET 3 OF 3
				EI	ND DATE	0/.	20/90	Eroowov E	vtonoio	n Droio			STATION	36+35 "SN	
				JC	OB DESCR	PTION	1-00U		xtensic	in Projec	л		OFFSET	28.94 RT	
	204			LC	OCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			B	ORING	01	6+50	_	[EQUIPMENT	Peterson	
	T.			E.	A. #		079-01-	<u>,</u>							
	2u			G	ROUND EL	EV15	49.56 (m)	<u> </u>	8/25/98	1.07	1548.5	METHOD	Rotary Muc	3
				H	AMMER DF	ROP SYS	БТЕМ _	cope - Cathe	ead				BACKFILLED	Yes DA	TE 8/26/1998
Ì	ELEV.	DEPTH	SAI	MPLE	BLOW C	OUNT	Percent	LAB TESTS	USCS		ΜΔΤ		SCRIPTION		REMARKS
	(m)	(m)	NO.	SPT	Increments 38	300 mm	Recov'd	w PL Sv	Group						
		- 20.27			42				-						
	1528.56 -	-21													
		21.34													
		- 21.49	3V	SPT	50/127	50/127		w, PI, Sv		21.49					
		_													
	1527.56 -	-22													
		-													
		_													
	1526.56 -	-23													
		-													
	1525.56 -	-24													
		-													
		_													
	1524.56 -	25													
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		_													
	1523.56 -	-26													
		-													
		-													
		-													
	1522.56 -	-27													
		-													
1/01		_													
Γ 5/1	1521.56 -	-28													
T.GD		-													
DO		F													
2 ∩		[
D.GP	1520.56 -	-29													
9015		-													
007		-													
DO		[
≥															

							8/	27/08			EXPL	ORATIO	N LOG			
					S	TART DATI	<u> </u>	27/08								SHEET 1 OF 1
					EI	ND DATE	0/.	1 520	Erooway E	vtonci	on Proio	~ +		STATION	16+43 "	<u>SS"</u>
					JC	OB DESCR		1-000		xtensit	JIFIOJE	JL		OFFSET	_204.71 MG	
	-Day				LC	OCATION		asnoe (Jounty, Ne	/ada				ENGINEER		
	1 Mart		5		B	ORING	01	6+70						EQUIPMENT	Peterso	
	Z.				E.	A. #	00	079-01-8)		GROU		LEVEL			••
	Ľ				G	ROUND EL	.EV15	56.54 (m)		8/27/98	NE		METHOD	Auger	
			(1)		H	AMMER DF	ROP SYS	STEM	Rope - Cath	ead				BACKFILLED	Yes	DATE <u>8/27/1998</u>
	ELEV. (m)	DE (EPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION	l	REMARKS
			0.00	30	SPT	1	6					Moist, loos	se, light gre	ey Silty Sand w	ith	Bulk sample
		-	0.46	57		5						fine to coa	arse sand.	ni-piastic nines,	00-03 /0	meters.
		-								SM						
		-														
	1555.54	<u>_</u> 1														
			4 50								1.37					
		-	1.52			7				-		Moist to w Silty Sanc	et, medium I with estim	ated 15% non-	ey brown plastic	
		-	1 0.8	3B	SPT	50/102	50/102		w, PI, Sv			fines, 85%	fine to ver	y coarse sand.	Abundant	
	1554.54	-2	1.90							SM		copples al	na boulders	.		
		-														
											2.74	Moist mo	dium dense	light brown S	ilty Sand	
	1553.54	-3	3.05									with estim	ated 20% r	non-plastic fines	s, 80% fine	
		-		3C	SPT	6	16					to coarse	sand. Mino	r gravel sized E	DG material	
		-	3.51			10				4						
		-														
	1552 54									SM						
	1002.01	- ·														
		-	1 57													
		-	4.57			10				-						
	4554 54	- -	5.03	3D	SPT	12	26				5.03					
	1551.54		0.00								0.00					
		_														
		_														
		-														
	1550.54	+6														
		-														
		-														
	1549.54	+7														
		-														
		-														
/01		-														
5/11	1548 54	Ē,														
GDT	.0.0.07	Ļ														
.TOC		-														
		F														
GΡJ	4	+														
15D.(1547.54	– 9														
0290		L														
0 TC		F														
D_D		-														
Z		1		1	1	1	1	1	1	1						

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					E			1-580	Freeway F	vtensio	n Proiec	` t		STATION	37+28	5N" r
					JC	OB DESCR				vada				OFFSET	4 L	<u> </u>
	24	ik.			LC	OCATION		17,50	Journy, Nev	aua				ENGINEER	Acker	
	No.				B	ORING		70.01			0001				Peterso	n
	1				E.	.A. #)					DRILLING		
	2				G	ROUND EL	EV15	52.53 (m)		8/26/98	3.81	1548.7	METHOD	Auger	
			11		H	AMMER DF	ROP SYS	STEM _	cope - Cath	ead				BACKFILLED	Yes	DATE 8/26/1998
	ELEV. (m)	D	EPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		_	0.00	34	SPT	5	12					Slightly m	oist to wet,	medium dense	to loose,	Bulk sample
		-	0.46	0,1		7	, <u>'</u>			_		non-plasti	c fines, 80-	85% fine to coa	irse sand,	meters.
		-										5-10% fin	e gravel.			
	4554 50	F.								SW						
	1551.53									SIVI						
		_	1 52	,												
		-	1.02			3				1						
		-	1.98	3B	SPT	4	8		w, PI, Sv		1.98					
	1550.53	-2	2									Wet, med	ium dense,	light brown Silt	y Sand	_
												to mediun	nated 10% r n sand, 5%	gravel.	s, 85% fine	
		-												0		
		-														
	1549.53	+3	3.05			3				-						
		-		3C	SPT	5	11		w, PI, Sv							
		-	3.51			6				SM						
		¥										Gravel ler	nse.			
	1548.53	+4	Ļ													
		-														
			4.57	,												
				3D	SPT	4	12									
	1547.53	+5	5.03			7					5.03					_
		-														
		-														
	1546.53	Ĺ	5													
	10 10100	-														
		-														
		-														
	1545 50		,													
	1040.03	T'														
		-														
5		-														
/11/0		-														
DT 5	1544.53	+8	3													
DT.G																
D Z		F														
Z C		-														
SD.GF	1543.53	+9)													
79015		F														
T 007		Ľ														
		L														
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							Q/	26/02			EXPLORATION	I LOG			-
					S	TART DATE	 	20/30							SHEET 1 OF 1
					E	ND DATE	_8/.	20/90		vtone	n Drojact		STATION	17+42 "SS	5"
					J	OB DESCRI	PTION	1-580	Freeway E	xtensio	on Project		OFFSET	<u>131.93 RI</u>	<u> </u>
	- Sm				L	OCATION		ashoe (County, Ne	/ada			ENGINEER	Ackor	
	- MM		5		B	ORING	01	7+60					EQUIPMENT	Peterson	
	Ä		×1		E	.A. #	00	079-01-8	5		GROUNDWATER	LEVEL	OPERATOR	1 61613011	
	1 A				G	ROUND EL	EV15	649.83 (m)		DATE DEPTH m	ELEV. m	METHOD	Auger	
			2		н	AMMER DF	OP SYS	STEM_F	Rope - Cath	ead	0/20/30 1.02	1040.2	BACKFILLED	Yes D	ATE 8/26/1998
				SA	MPLE	BLOW C	OUNT								
	ELEV. (m)	D	EPTH (m)	NO.	TYPE	150 mm	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATE	ERIAL DE	ESCRIPTION		REMARKS
			0.0	0	ODT	4	10				Slightly mo	oist to wet,	loose to mediur	n dense,	Bulk sample
			0.4	6 ZA	501	6	10				dark grey t 10-20% nd	o grey Silt	y Sand with esti ines. 80-90% fin	mated e to coarse	taken from 0 - 1.5 meters.
		-								1	sand, 0-5%	6 gravel.			
		F													
	1548.83	+1													
		-													
		+	1.5	2						-					
		Ť		2B	SPT	3	7		w, PI, Sv						
	1547.83		1.9	8		4				-					
		-													
		-								CM					
		-								SIVI					
		f.	30	5											
	1546.83	Ē	3 0.0	5		3				1					
			35	2C	SPT	4	10								
		-	3.5	<u> </u>		0				1					
		+													
	1545.83	+4	ŀ												
		-													
		-	4.5	7											
				20	SPT	4	22								
	1544.83	4	5.0	3 20	J. J. F. I	11	~~~				5.03				
		-	-												
		+													
		F													
		-													
	1543.83	+•	6												
		F													
	1542.83	+7	,												
		╞													
		F													
10		F													
5/11/		F													
DT	1541.83	1	5												
OT.G															
ĭ ⊇		F													
N		F													
D.GF	1540.83	+9)												
9015		F													
007		F													
DOT		F													
NV															

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					S	TART DATI	= <u>0</u> / 8/	27/08					47 50 80	SHEET 1 OF 1
					E	ND DATE	0/	21/90 1-580	Ereeway E	vtoncia	n Project	STATION	17+56 "S	
					JC	DB DESCR						OFFSET		
	24				LC	DCATION		17,20	Journey, Nev	aua			Acker	
	×.	نه ۱	5		BO	ORING		70 01 4					Peterson	
	1 miles				E.	A. #		59 /5 /	m)		DATE DEPTH m ELEV. m	DRILLING	Augor	
		V			G	ROUND EL	EV	500.40 (liii) Iono Coth		8/27/98 NE	METHOD	Auger Voo	0/27/1009
		, `)	777		H	AMMER DF	ROP SYS	STEM	ope - Calin	au		BACKFILLED	D	ATE
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION		REMARKS
		-	0.00	4A	SPT	1	3				grey Silty Sand with	estimated 10%	e, brown	Bulk sample taken at 0.0 -
		-	0.46			2				_	non-plastic fines, 80%	% fine to coarse	sand,	1.52 meters.
											5-10 % line gravei.			
	1557.45	— 1												
		-												
		-	1.52											
		-		4B	SPT	4	8		w PL Sv					
	1556 45	_ ,	1.98			4			,,					
	1000110	-												
		-								SM	Cobblog at 2.4 2.7	notore		
		-									CODDIES at 2.4 - 2.7 1	neters.		
	1555 /5	13	3.05											
	1000.40	-		40	ODT	4				1				
		-	3.51	4C	SPI	5 6	11							
		-									Cobbles at 3.65 - 3.9	6 motors		
	1664 46										Cobbles at 5.05 - 5.9	o meters.		
	1004.40	4												
		-	1 57								Cobbles at 4.3 - 4.6 r	neters.		
		-	4.57			7				-				
	4550 45	- -	5.03	4D	SPT	11 9	20				5.03			
	1553.45	_ _									0.00			
		-												
		-												
		-												
	1552.45	+6												
		-												
		-												
	1551.45	+7												
_		_												
11/01		-												
DT 5/	1550.45	+8												
T.GD		-												
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D.GP	1549.45	+9												
9015		-												
200 -		-												
DOT		Ľ												
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					S		: 	11/00					20.07 "0	SHEEF 1 OF 1
					El			I_520		vtenci	n Project	STATION	38+07 "SP	N
					JC	B DESCRI	PTION			vada		OFFSET	<u></u> SDB	
	- Am				LC	DCATION		8100 (aud		ENGINEER	JD 200LC	
	5 Mar				BC	DRING	0	0+07 (1	//QD-1) -				-	
	The second se	\sum			E.	A. #		79-01-0 50.00)		DATE DEPTH m FLEV	m DRILLING	Trackhaa	
	2u				GI	ROUND EL	EV15	50.93 (<u>m)</u>		8/11/00 NE	METHOD		
			N		HA	AMMER DR	OP SYS		IA			BACKFILLED	YesD	ATE 8/11/2000
	ELEV.	DEPT	Ή	SAN NO	MPLE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL	DESCRIPTION		REMARKS
	(m)	(m)				Increments	<u>300 mm</u>	Recov'd		SM	Dry, loose, dark b	rown Silty Sand wi	th	
		_									0.30 estimated 20% no	on-plastic fines and	80% fine	
		- 0	76								Dry to slightly mo	st, loose to mediur	n dense,	
		-	10	1Δ	GRAB				PL Sv	1	12% non-plastic f	nes, 82% fine to c	barse sand,	
	1549.93 -	-1 1.	.07						11,00	-	and 6% fine grave	el. Unit contains in ands Rootmass to	terbedded	
											Easily excavated.		0.011.	
		-												
		-								0.0				
	1548.93 -	-2								SM				
		-												
		-												
	1547.93 -	3 3.	05											
		- 3.	35	1B	GRAB				PI, Sv					
		-								1				
		-									3.66			
	1546.93 -	4												
	10 10100	-												
		-												
		-												
	1545.02	-												
	1040.90	-												
		-												
		-												
		-												
	1544.93 -	6												
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		F												
	1543.93 -	-7												
_		F												
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JT 5/	1542.93 -	-8												
T.GD		-												
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D.GP.	1541.93 -	-9												
9015[_												
3200		F												
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SHET 1 OF 1 SHET 1 OF 1 SHET 1 OF 1 END DATE 007:00. I-300 Freeway Extension Project 97:81 10:00 RT UCATION Washoe County, Newada Provide Provide Provide Provide E.A. # 007:01-5 GROUNDWATER ILVID Provide Provid								Q/	27/09			EXPLORATION LOG			
END DATE END DATE Construction 1280 Freeway Extension Project STATION 1481/85 Job ESCHPTION 1580 Freeway Extension Project CRUNDWATE LICENT CRUNDWATE L						S	TART DATE	<u> </u>	27/90						SHEET 1 OF 1
Loc. True People Plantaci Friget OFFSET 1200 RL SOURCE Loc. True Washed County, Nevada BORING OTP-001-5 GROUNDWATE LEVEL FREE NO BORING 019-00 Ecolority, Nevada GROUNDWATE LEVEL FREE NO BORING 019-00 Ecolority, Nevada GROUNDWATE LEVEL FREE NO GROUND ELEV 1055-36 (m) GROUNDWATE LEVEL Paterson Paterson MATERIAL Decore No True Auger BRUNNO Auger LEV Deny No True No Material State No 1063.36 -1 0 -1 0 -1 BRUNNO						EI	ND DATE	8/	27/98			n Droiset	STATION	18+83	SS"
Exercise Operation Water County						JC	OB DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET	12.00 R	Γ
BORING 019400 EA 0079-01-5 GROUNDWATTER LEVL DATE DEPARTOR Petrason GROUND ELEV. 1554.36 (m) Image: State of the state of		. Des				LC	OCATION		ashoe (County, Ne	ada		ENGINEER	NG	
EA.# OT99-01-5 GRUND TELEV_1554.36 (m) HAMMER DROP SYSTEM_ROPE - Cathead Description Data [Data [Da		1 MM	6	5		B	ORING	01	9+00				EQUIPMENT	Peterso	<u>n</u>
DRCUND ELEV. DSAME DEAL PARTY DEAL PARTY <thdeal party<="" th=""> DEAL PARTY DEAL PARTY<</thdeal>		Ĩ,		67		E.	.A. #	00)79-01-5	5		GROUNDWATER LEVEL		1 6(6130	-1
HAMMER DROP SYSTEM Rope - Cathead Internation DeckFilleD Ves		ž.				G	ROUND EL	EV15	554.36 (m)		B/27/98 NF	METHOD	Auger	
ILEV DPFTH MAD TPE Diversity Made with a strand of the strand					1	H.	AMMER DR	OP SYS	STEM_F	Rope - Cath	ead		BACKFILLED	Yes	DATE 8/27/1998
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	× ×	è	5		BC	ORING							Peterson	
	1 h				E.	A. #		579-01-0) m)		DATE DEPTH m ELEVEL	DRILLING	Augor	
	Ÿ				GI	ROUND EL	EV1	554.60 (m) Sana Cath		8/27/98 NE	METHOD	Auger	0/07/4000
		\			HA	AMMER DF	ROP SYS	STEM _	ope - Calife	eau		BACKFILLED		DATE 0/27/1998
	ELEV. (m)	DEI (r	PTH n)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-	0.00	5A	SPT	2	7				Dry to slightly moist, brown grey to light br	loose to mediun own Silty Sand	n dense, with	Bulk sample FRW-5 at 0.0 -
		-	0.46			4				-	estimated 15% non-p	lastic fines, 75%	% fine to	1.52 meters.
		-										e glavel.		
	1553.60	— 1												
		-												
		-	1.52											
		-		5B	SPT	3	7							
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	1551 60	L ₃	3.05											
	1001.00	-		50	ерт	7	10			1				
		-	3.51	50	371	9	19		w, PI, SV					
		-												
	1550 60													
	1550.00	-												
		-	4 57											
		-	4.07	_		11				1	Decomposed boulder	·S.		
	15/0 60	5	5.03	5D	SPT	17 14	31				5.03			
	1043.00	-												
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					JC	DB DESCRI	PTION	2500				OFFSET <u>6.27 L1</u>	
	- An-				LC	DCATION		20,50	Journy, Nev	aua		ENGINEER	
	×.	e U	5		B	ORING						OPERATOR Peterson	
	1 m				E.	.A. #		EA EO () m)		DATE DEPTH m ELEV. m	DRILLING Augor	
	h				G	ROUND EL	EV10	004.00 (Г	III) Dana Cath		8/27/98 3.20 1551.4	METHOD Auger	9/27/1009
					H	AMMER DR	OP SYS	STEM _	tope - Cathe	eau		BACKFILLED <u>Yes</u>	DATE 0/27/1990
	ELEV. (m)	DE (I	PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	REMARKS
		-	0.00	5A	SPT	2 7	15				Sand with Gravel wit	lense, grey brown Silty h estimated 10-20%	Bulk sample taken from 0-1.5
		-	0.46			8				-	non-plastic fines, 80%	% sand, 0-10% gravel to	meters.
											2.0 011.		
	1553.58	-1											
		-											
			1.52										
				5B	SPT	5	15		w, PI, Sv				
	1552.58	-2	1.98			6				_			
		_											
		-								SM			
	1551.58	-3	3.05										
	7	¥		50	SPT	5	16				Decomposed cobbles	s and boulders present.	
		-	3.51	30		11							
		-											
	1550 58	4											
	1000100												
		-	4.57										
		-	-		ODT	10	45			-	Decomposed cobbles	s and boulders present.	
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EXPLORATION LOG	
START DATE 0/27/09	SHEET 1 OF 1
END DATE <u>8/21/98</u> STATION <u>20</u>	0+39 "SS"
JOB DESCRIPTION 1-580 Freeway Extension Project OFFSET 54	4.87 LT
LOCATION Washoe County, Nevada ENGINEER	lG
BORING <u>020+60</u> EQUIPMENT <u>A</u>	otorson
E.A. # 0079-01-5 GROUNDWATER LEVEL OPERATOR	eleison
GROUND ELEV. 1560.68 (m)	uger
HAMMER DROP SYSTEM Rope - Cathead BACKFILLED Y	es DATE 8/27/1998
	DEMARKO
(m) NO. TYPE ISO'NIN Last Percent LAB TESTS Group INTATERIAL DESCRIPTION	REMARKS
0.00 1 Dry to moist, medium dense to dense, gr 6A SPT 4 10 rust orange Silty Sand with estimated 15	rey to
- 0.46 6 non-plastic fines, 80-85% fine to coarse	sand.
Large surface boulders to 2 meters.	
- 1.52	
	Bulk sample
_ 6B SPT 13 24 w, PI, Sv	FRW-6 at 1.52 -
	5.05 meters.
Cobbles or partially decomposed boulder	rs.
1557.68 -3 3.05	
6C SPT 10 20	
- 3.51 10 Abundant fully decomposed cobbles and	1
1556.68 +4	
4.57	
155568 - 5 5.03 15 5.03	
1553.68 -7	

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	12			L	OCATION		2100		aua					Acker	
	K. Mar			В	ORING		70 01 4			CROU				Peterson	
	4			E	.A. #		61 24 () m)		DATE	DEPTH m	ELEVEL	DRILLING	Augor	
	V			G	ROUND EL	EV	01.34 (iii) Dono Coth		8/27/98	NE		METHOD	Auger Voo	0/27/1009
				Н	AMMER DF	ROP SYS		tope - Calin	au				BACKFILLED		DATE0/27/1990
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		0.00) 6A	SPT	1	5		w. Pl. Sv			Slightly m	oist, loose.	light grey Silty	Sand with % fine to	
		- 0.46	3		3				SM		coarse sa	nd, 5% gra	vel.		
		-													
	1560 34	<u> </u>								0.91	Partially to	a totally day	omposed grani	tic cobbloc	-
	1000.04	-									and bould	lers in a silt	y sand matrix.		
		-													
		-													Bulk sample
	1550 3/														1.5-3.7 meters.
	1009.04	_													
		-													
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	1558.34	3.20) 6B	SPT	50/0	50/0									
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	1557.34	-4													
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		-								4.57					No sample -
		-													refusal on
	1556.34	-5													boulder.
		-													
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	1555.34	-6													
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	- An-				LC	DCATION		2.10	Journy, Nev	aua		
	N. N.	e.	A		BO	ORING		2+10				
	1 m				E.	A. #		79-01-0)		DATE DEPTH m ELEVEN DRILLING	
	le				G	ROUND EL	EV15	00.90 (m) Nana Cath		8/27/98 NE METHOD Auger	0/07/4000
					H	AMMER DR	OP SYS	STEM	tope - Cathe	ead	BACKFILLED Yes	DATE 8/27/1998
	ELEV. (m)	DEF (n	PTH n)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		-	0.00	7A	SPT	25	16				Abundant surface boulders to 1.22 meters with Silty Sand.	Bulk sample FRW-7 at 0 -
		-	0.46		_	11				SM		1.5 meters.
		-									Hard Granitic boulder.	_
	1555.06	1										
	1000.00	-										
		-	1.52									
		-		76	ODT	3	_				4.00	
		-	1.98	7B	SPI	45	9		w, PI, Sv		1.83 Dry to moist, loose to medium dense, light	_
	1554.96	_2									grey to brown Silty Sand with estimated	
											sand, 5% fine gravel.	
		-										
		-										
	1553.96	-3	3.05			10				-		
			2 5 1	7C	SPT	15	29			CM		
		_	3.51			14				SIVI		
		-									Silty Sand matrix with decomposed granitic	
	1552.96	-4										
		-										
			4.57							_		
		-		7D	SPT	20	60					
	1551.96	-5	5.03			40					5.03	_
		-										
	1550.96	-6										
		F										
		F										
	1549.96	-7										
		-										
		F										
/01		F										
5/11.	1548.96	R										
GDT	10-10.30											
DOT.		_										
NV_L		F										
GP.J		- -										
15D.(1547.96	-9										
0620		Ļ										
OT 0		F										
D_D(-										
2						L	I	I	I	1	1	1

ſ					07		. 12	/11/98			EXPLO	ORATIO	N LOG			
					SI		12	/11/98							42.07 "01	SHEET 1 OF 1
					E٢			1-580	Freeway F	vtensi	on Proiec	` †		STATION	43+27 °SI	N [*]
					JC	DB DESCRI	PTION W	ashoe (ada				OFFSET		
	12				LC	DCATION	02	3+50	Journy, Nev	uuu					Acker	
	× v				BC	ORING		70 01 6			CROU				Peterson	
	4				Ε.	A. #		60 12 () m)		DATE		ELEVEL	DRILLING	Augor	
	Ve				GI	ROUND ELI	EV	00.13 (iii)		12/11/98	NE		METHOD	Auger Voo	10/11/1000
)			HA	AMMER DR	OP SYS			au				BACKFILLED	D	ATE
	ELEV.	DEPT	н	SAN NO.	<u>IPLE</u> TYPE	BLOW CO 150 mm	DUNT Last	Percent Recovid	LAB TESTS	USCS Group		MATE	ERIAL DI	ESCRIPTION		REMARKS
	(,	0.	.00	^	CDT	6	22	Recova		SM		Moist, me	dium dense	e, dark brown Si	Ity Sand	Bulk sample
		- 0.	.46	~	351	24	52		W, FI, 3V		0.34	coarse sa	nd.	suc lines, 75% li		0.0-1.5 meters.
		-										Cobbles a	ind boulder	s set in a silty sa	and matrix.	
	4567 40	-														
	1507.15	Γ'									1.13	Moist me	dium densi	e light brown Si	tv	
		- 1.	.52									Gravelly S	Sand with e	stimated 15% n	on-plastic	
		-		_	ODT	12	05			SM		fines, 60% medium q	a fine to co ravel.	arse sand, 25%	fine to	
	1500.40	1.	.98	в	SPI	18 17	35		W, PI, SV		2.01	0				
	1566.13										2 29	Hard gran	ite cobbles	and boulders.		
		-									2.20	Refusal or	n boulder.			
		-														
	1565 12															
	1505.15	-3														
		-														
		-														
	156/ 13															
	1004.10	-														
		-														
		-														
	1563 13	-5														
	1000.10	-														
		-														
		-														
	1562 13	-6														
	1002.10	-														
		-														
		-														
	1561 13 -	-7														
	1001.10	-														
		-														
/01		-														
5/11.	1560 13	-8														
GDT	1500.15	-														
DOT.		+														
Ş		F														
GPJ	1559 13															
015D		Ļ														
0079		F														
DOT		F														
N																

							. <i>\</i> /'	30/00			EXPL	ORATIO	N LOG			
					ST		: <u> </u>	30/00							00.50 000	SHEET 1 OF 1
					EN	ND DATE		1_EQU		vtenci	n Proio	~ t		STATION	23+53 "SS"	
					JC	B DESCRI	PTION	006-1		xtensio	on Projec	<i>.</i>		OFFSET	64.16 LI	
					LC	OCATION			Jounty, Ne	ada				ENGINEER	Komateu E	 C220
	2MM	e e	5		BC	ORING	02	4+75			[EQUIPMENT	-	0220
	Ę				E.,	A. #	00	079-01-5)		GROU					
	ž.	~			GF	ROUND EL	EV15	575.10 (m)		3/30/00	3.35	ELEV. m 1571.7	METHOD	Trackhoe	
			\mathbf{v}		HA	AMMER DR	OP SYS	STEM	IA					BACKFILLED	Yes DA	TE 3/30/2000
	ELEV. (m)	DE (PTH m)	SAN NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	()	-	,			Incrementa	500 1111	TRECOV U		SM	0.30	Moist, me Gravel wi	dium dense th estimated	e, brown Silty S a d 20% low plast	and with icity fines,	
		-	0.76									60% fine to coarse rol	to coarse sa unded to su	and, and 20% fin brounded grave	ne to el. Unit	
		-	0.70	Δ	GRAB				PL Sv	SM		Moist, me	dium dense	e, black Silty Sa	nd with	
	1574.10 -	-1	1.07	~					11,00	-	1.22	19% non- and 3% fi	plastic fines	s, 78% fine to co	barse sand,	
	1573.10 -	- - - - - 2									1.22	boulders t High mica Unit also Moist to w Clayey Sa plasticity f 20% fine	to 20% of u a content. F has odd odd vet, medium and with Gr fines, 62% f to coarse gu	nit. DG parent r ine rootmass to or. dense, blue-gr avel with 18% n ine to coarse sa ravel. Unit cont d sand with silt c	een nedium and, and and	
		_										scattered 20% of ur	subrounded	d cobbles and b	oulders to	
	1572 10	-								SC						
	1572.10	_ 3														
		¥—	3.35							-						
			3.66	В	GRAB				PI, Sv	4						
		F														
	1571.10 -	-4														
		Ľ														
		F									4.57	Slight to n	nodoroto w	ator optry into to	ot pit	
		F										during exc	cavation. E	xtensive caving	during	
	1570.10 -	-5										excavatio	n.			
		F														
		F														
	1569.10 -	-6														
		F														
		F														
		Ľ														
	1568.10 -	-7														
		ŀ														
		F														
6		F														
5/11/	4507 (0	F _														
DT	1567.10 -	8														
OT.G		L														
		F														
4 L d		F														
5D.G	1566.10 -	-9														
1061		Ľ														
DT 00		F														
/_DC		╞														
ź																

							. <i>\</i> /'	30/00			EXPLO	ORATIO	N LOG			
					ST	ART DATE	: <u> </u>	30/00							00.00 "00"	SHEET 1 OF 1
					E١	ND DATE		1_F00		vtenci	n Projec	~ t		STATION	23+69 "SS"	
					JC	B DESCRI	PTION	1-000		xtensio	on Projec	1		OFFSET	9.51 LI	
	34				LC	OCATION			Jounty, Nev	/ada				ENGINEER	<u>SDB</u>	220
	2MM	e e	5		BC	ORING	02	24+76			[EQUIPMENT	-	,220
	4		67		Ε.	A. #	00	079-01-8	5		GROU	NDWATER				
	n n n n n n n n n n n n n n n n n n n	1			GI	ROUND EL	EV. 15	571.08 (m)		DATE 3/30/00	2 74	ELEV. m 1568 3	METHOD	Trackhoe	
			\mathbf{v}		HA	AMMER DR	OP SYS	STEM _N	IA		0,00,00	2.7 1	1000.0	BACKFILLED	_Yes DAT	E3/30/2000
	ELEV.	DE	PTH m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
	(11)	-	,			Increments	<u>300 mm</u>	Recova		SM	0.30	Moist, me with estim	dium dense ated 25% r	e, dark brown Si non-plastic to lov	Ity Sand	
		-								SM	0.61	fines, 65%	6 fine to coa	arse sand, and	10% fine to	
		F									0.01	cobbles a	nd boulders	S.		
	1570.08 -		1 07									Moist, me	dium dense	e, brown to dark	brown	
	1370.00	_	1.07	Δ	GRAB				PL Sv	-		non-plasti	c to low pla	sticity fines, 659	% fine to	
		-	1.37	~					11,00	-		coarse sa	nd, and 15°	% fine to coarse	gravel.	
		-										granitic bo	oulders and	cobbles compri	ising 30 to	
		-										40% of un Moist to w	nit. Vet medium	dense brown t	o dark	
	1569.08 -	– 2								SM		brown Silt	y Sand with	n 15% non-plast	tic fines,	
												80% fine f Unit also	to coarse sa contains gra	and, and 5% fine anitic cobbles ar	e gravel. nd boulders	
	7											comprisin	g 30% of u	hit. high concer	trations of	
	_	ŧ										contains s	scattered cla	ayey sand nodu	les to	
	1568.08 -	-3										approximate 1 m	ately 4 inch	diameter. Fine	rootmass	
		-	3.35									to 1 m.				
			3.66	В	GRAB				PI, Sv		3.66					
		-										Moderate	to high wat	er entry into tes	t pit during	
	1567.08 -	-4										excavatio	n.			
		-														
		-														
	1566.08 -	-5														
		-														
		-														
		-														
	1565 09															
	1000.00															
		-														
		F														
	150155	F _														
	1564.08 -	† 7														
Ę		F														
,11/0		+														
JT 5/	1563.08 -	-8														
T.GL		F														
DO																
ЛЛ		L														
O.GP.	1562.08	-9														
90151		-														
\$ <u>7</u> 00		F														
DOT		F														
N		[

					-		- 3/ [,]	30/00			EXPLO	ORATIO	N LOG			
					ST		= <u>-</u> 3/*	30/00							40.07	SHEET 1 OF 1
					E١	ND DATE		1_500		vtenci	n Proise	•†		STATION	43+67 "SN	
					JC	DB DESCRI	PTION	1-000		xtensi	on Projec	1		OFFSET	18.58 KI	
					LC	OCATION			Jounty, Ne	ada				ENGINEER	Komateu E	 C220
	2MM		È		BC	ORING	02	24+77			[EQUIPMENT	-	0220
	4		7		Ε.	A. #	00	79-01-	5		GROU	NDWATER				
	n n n n n n n n n n n n n n n n n n n	1			GI	ROUND EL	EV15	66.92 (m)		DATE 3/30/00	2 29	LLEV. m	METHOD	Trackhoe	
					HA	AMMER DR	OP SYS	STEM	IA		0,00,00	2.20	100110	BACKFILLED	_YesDA	TE 3/30/2000
	ELEV.	DEP	тн	SAM	MPLE	BLOW CO	OUNT	Percent		USCS		МАТ				DEMADKS
	(m)	(m))	NO.	TYPE	Increments	300 mm	Recov'd	LAB TESTS	Group		Dry Joose	e light brow	n to grey Silty S	and with	REWARKS
		-								SM	0.30	Gravel wit	th estimated	d 15% non-plast	ic fines,	
		-										gravel.			coarse	
		- c	0.91									Moist, me	dium dense el with 12%	e, dark brown Si Snon-plastic fine	Ity Sand	
	1565.92 -	-1		А	GRAB				PL Sv	1		fine to coa	arse sand, a	and 23% fine to	coarse	
		1	1.22						,	-		gravel. U	nit contains	subangular to	ranitic	
		-								SM		cobbles a	nd boulders	s to 1 meter in d	iameter,	
		-								0.11		comprisin	g approxim	ately 30-50% of	unit. Unit	
	1564.02											rootmass	to 1.5 mete	ers.		
	1304.92	2														
	-	¥														
		-									2 74					
		-									2.14	Wet, med	ium dense,	dark brown We	II-Graded	
	1563.92 -	-3										Sand with	Silt with 1	0% non-plastic f	ines, 78%	
		F										gravel. U	nit contains	moderately we	athered	
		F								SW		subrounde	ed to suban	gular granitic co	bbles and	
		Ľ								SIVI		of unit.	comprising	approximately 2	0 10 30%	
	1562.92 -	4	3.96							4						
	1002.02	- 4	4.27	В	GRAB				PI, Sv		4.27					
		-										High wate	er entry into	test pit during e	xcavation.	
		-										woderate	difficulty ex	cavating test pr	I.	
		-														
	1561.92 -	-5														
		E														
		L														
		L														
	1560.92 -	-6														
		-														
		-														
		-														
	1550.02	7														
	1559.92	_ '														
		F														
<u>_</u>		-														
/11/0		-														
JT 5,	1558.92 -	-8														
T.GL		-														
00																
N		Ľ														
,GP,	1557.92 -	-9														
015D		Ļ														
1079I		-														
OT (F														
D N		-														
z		1				I		1	1	1	1					

							10	0/2/00			EXPLORATION LOG			
					ST	ART DATE	12	13/90						SHEET 1 OF 1
					ΕN	ID DATE	_12	13/90	 		n Drain at	STATION	27+54 "F	
					JO	B DESCRI	PTION	1-580	Freeway E	xtensic	n Project	OFFSET	50.03 L1	
	.tre				LC	CATION		ashoe (County, Nev	ada		ENGINEER		
	1 Mm				BC	DRING	02	27+50		ſ		EQUIPMENT	 Detersor	
	I.				Е./	A. #	00)79-01-{	5		GROUNDWATER LEVEL	OPERATOR	1 6(6130)	I
	i de				GF		EV15	578.25 (m)		DATE DEPTH m ELEV. m 12/3/98 2.13 1576.1	METHOD	Auger	
					HA	MMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	Yes	DATE <u>12/3/1998</u>
	ELEV.	DEPTH	H S	AMP	LE	BLOW CO	OUNT	Percent		USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NC	ידן .כ	YPE	Increments	300 mm	Recov'd		Group			w Sand	Bulk sample
		- 0.0	A	s	PT	1	2		w, PI, Sv	SM	with estimated 25%	slightly plastic fi	nes, 75%	taken from
		- 0.4	46			1					0.46 fine to coarse sand. Wet loose red brown	Clavey Sand	with	0.0-1.5 meters.
		Ľ								SC	estimated 35% mediu	im plastic fines.	65% fine	
	1577.25	<u>_1</u>									to coarse sand.			
		-									Soft, completely weat	hered, grey bro	wn to	_
		- 1.5	52								grey Granitic Bedroc	К.		
		-	B		PT	11 10	35		W PL SV					
	1576.25		98			16			w, i i, ov					
		¥ ʻ												
		-												
		-												
			15											
	1575.25					13				-				
		- 35	51 C	; S	SPT	16 17	33							
		-								-				
		-												
	1574.25	+4												
		4.5	57			15				_				
		-	D) s	PT	29	54							
	1573.25	<u>+5</u> 5.0)3			25				_				
		-												
		-												
	1572.25	-6 6.1	10											
		-	F	s	PT	17 26	55							
		6.5	55			29					6.55			4
		Ļ												
	1571.25	+7												
		F												
		F												
1/01		Ĺ												
5/1	1570.25	-8												
.GDT		-												
DOT.		-												
N		F												
GPJ	1560.05	Ĺ												
115D.	1009.25	Γ.a												
06700		-												
OT C		-												
		F												
<u> </u>														

							. 11	0/2/08			EXPLORATION LOG			
					S	TART DATE	<u> </u>	2/2/00					oa o = "-	SHEET 1 OF 1
					EI	ND DATE	12	1 500	Eroowov F	vtonoio	n Project	STATION	27+88 "P	
					JC	DB DESCRI	PTION	1-000				OFFSET	MG	
	-pm				LC	DCATION			Journy, Nev	aua		ENGINEER	Acker	
	A MAN	0	\$		B	ORING			_				Peterson	
	4				E.	A. #		079-01-0) 		DATE DEPTH m ELEVEL	DRILLING		
	20				G	ROUND EL	EV15	566.78 (m)		<u>12/3/98</u> 1.52 1565.3	METHOD	Auger	4.0/0/4.000
					H	AMMER DR	OP SYS	STEM	cope - Cath	ead		BACKFILLED	res[DATE
	ELEV. (m)	DEP (m	тн)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		- (0.00	А	SPT	2	2				Very moist, very loose with estimated 15-20	e, grey brown S % non-plastic fi	nes,	Bulk sample taken from 0 -
		- (0.46			1				SM	80-85% fine to coarse	e sand.		1.5 meters.
		Ľ									0.76			_
	1565.78	<u>_1</u>									Very soft, completely Bedrock.	weathered, gre	y Granitic	
		-												
		<u> </u>	1.52											
		Ľ		в	SPT	13 18	46		w, PI, Sv					
	1564.78	-2	1.98		_	28			, , -	-				
		-												
		-												
		-												
	1563 78	÷	3.05											
		-		C	ерт	14	22]				
		- :	3.51	C	351	13	52							
		-												
	1562 78	Ī.												
	1002.10	-												
		-	1 57											
		-		-	ODT	20								
	1561 78	^t	5.03	D	SPI	30 50	80							
	1001.70	-]				
		-												
		-												
	1560 78	1	5 10											
	1300.70	-	5.10			22				-				
		- 6	6.55	Е	SPT	41 42	83				6.55			
		-									0.00			-
	1550 79	_ _												
	1559.76	Τ'												
		-												
01		-												
5/11/	4550 70	-												
BDT	1558.78	-8												
DOT.C		F												
		+												
GPJ	4553	-												
15D.4	1557.78	9												
0620(F												
ÓT 0		-												
		F												

							10	///02			EXPLORATION LOG			
					ST	FART DATE	12	/4/90						SHEET 1 OF 1
					El	ND DATE	_12	1 5 9 0	 Eroowov E	vtonoio	n Drojaat	STATION	29+04 "P"	
					JC	DB DESCRI	PTION	1-000				OFFSET	<u>39.37 LT</u>	
	200				LC	DCATION			Journey, Nev	aua		ENGINEER	Acker	
	2 Mm	-			BC	ORING		9+00	-	r			Peterson	,
	The second se				E.	A. #		079-01-5	<u>,</u>			DRILLING		
	te				GI	ROUND EL	EV15	87.92 (m)	— E	<u>12/4/98</u> 5.33 1582.6	METHOD	Auger	
					HA	AMMER DR	OP SYS	STEM	Rope - Cathe	ead		BACKFILLED	Yes D	ATE 12/4/1998
	ELEV. (m)	DEP1 (m)	ГН -)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0	0.00	А	SPT	2	18				Soft, completely weat Bedrock	hered, grey Gra	anitic	Bulk sample
		- 0	.46			13	_			-				0.0-1.5 meters.
		-												
	1596.02	Ĺ,												
	1000.92	Γ'												
		- 1	.52											
		-		_		27			51.0	-				
		- 1	.98	в	SPT	38 43	81		w, PI, Sv					
	1585.92	-2-												
		-												
		-												
	1584.92	<u>-3 3</u>	8.05							-				
			54	С	SPT	33 45	45		w, PI, Sv					
		-	.51							-				
		-												
	1583.92	<u>+</u> 4												
		-												
		4	.57							-				
		_		D	SPT	23	84		w, PI, Sv,					
	1582.92	-5 ⁵	5.03			50			Sn	-				
	7	\mathbf{x}												
		Ŧ												Water level
														min. after
	1581.92	-6 6	5.10											drilling.
		-		_	ODT	19								
		6	5.55	E	501	43 50	93				6.55			
		-												
	1580.92	— 7												
		+												
		-												
01		-												
5/11/	1570.00	Ļ.												
BDT	1579.92	7 8												
DT.C		F												
		F												
I L L L		F												
15D.C	1578.92	-9												
10670														
)T 0(+												
/_DC		-												
ź								1		1				

							_ 12	0/4/98			EXPL	ORATIO	N LOG			
					S		= <u>'</u> 10	2/ <u>4</u> /98							00 - 40 ""	SHEET 1 OF 1
					El	ND DATE		1_50	Freeway E	vtoneir	n Proio	~t		STATION	29+48 "P	
					JC	DB DESCRI					пттоје	JL		OFFSET		
	-Dm				LC	DCATION		asiiue (Journy, Ne	aud				ENGINEER	Acker	
	M.M.				B	ORING	02	29+50	-	I					Peterson	
	- A				E.	A. #	0	079-01-5	, ,		GROU					
	J.				G	ROUND EL	.EV15	682.28 (m)		12/4/98	NE		METHOD	Auger	
			N		H	AMMER DF	ROP SYS	STEMF	Rope - Cath	ead				BACKFILLED	_YesD	ATE 12/4/1998
	ELEV. (m)	DEPT (m)	н	SAN NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
	. /	0.	00	^	ODT	2	10	110001 0		SC		Wet, loos	e to mediur	n dense, brown	Clayey	Bulk sample
		- 0	46	А	501	5 14	19				0.40	bedrock.	idual soli de	erived from gran		0.4-1.5 meters.
		-										Soft, com	pletely wea	thered, grey tan	Granitic	
		-										Deurock.				
15	581.28 ·	+1														
		- 1.	52			20				-						
		- 1	00	В	SPT	22	45		w, PI, Sv							
15	580.28 ·	-2	98			23				-						
		-														
15	579.28	<u>-3</u> 3.	05													
		-		С	SPT	11	51		w. PL Sv							
		- 3.	51	•		28			,,.	4						
		-														
1	578.28	Ĺ														
	570.20	-														
		-	F7													
		- 4.	57			13				-						
		- 5	03	D	SPT	21	51									
15	577.28 ·	-5-0.	03							1						
		_														
		-														
15	576.28	-6 6.	10							4						
		F		Е	SPT	30	46									
		6.	55			40				-						
		-														
15	575.28 ·	- 7														
		-														
		7	62													
1/01				-	0.5-7	16				1						
15	574.28 -	-8 8.	08	F	SPT	36	36									
GDT		-								1						
DOT		-														
Z		F														
GPJ	572 20	Ĺ														
015D.	JIJ.20 ·	- 9 <u>9</u> .	14							-						
0790		-		G	SPT	31 50/114	50/114									
DT (9.	60								9.60					-
		-														
<u> </u>			1				1									

							. 12	2/4/98			EXPLORATION LOG			
					S		12	2/4/98						SHEET 1 OF 1
	ř				Εſ			I-580	Freeway F	vtensio	n Project	STATION	<u>30+39 "P"</u>	
		/			JC	DB DESCRI	PTION	ashoo (vada		OFFSET	MG	
	200	, il in i			LC	DCATION				aua			Acker	
	W		6		BO	ORING				[Peterson	
	The second se				E.	A. #		00 74 ())		DATE DEPTH m ELEVEL	DRILLING	August/110	Cara
	la la				G	ROUND EL	EV15	96.74 (m)		12/4/98 NE	METHOD		
			77		H	AMMER DR	OP SYS	STEM	cope - Cath	ead		BACKFILLED	YesD/	ATE
	ELEV. (m)	D	EPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL D	ESCRIPTION		REMARKS
		-	0.00	A	SPT	8 28	60				Moist, very dense, r Sand with estimated	ed brown Clayey 35% medium p	Gravelly	
		-	0.46	;		32				_	fines, 45% fine to co	arse sand, 20%	gravel.	
		-								SC	Volcanic sufface bo	ulders to 1.8 me	ters.	
	1505 7/	E	0.91	в						_				Switch from
	1595.74	Ľ									1.22			auger to core -
		F									Soft, completely we	athered, grey bro	own to	refusal on boulder
		-									grey Granitie Deare			
	450474	-												
	1594.74	T												
		_	2.44											
		+		Ũ										
		-												
	1593.74	+3												
		-												
		F	3.96	_										
	1592.74			D						-				
		Ľ												
		-												
	1591.74	+5												
		F	F 40											
		-	5.49	E						-				
		-												
	1590.74	-6	6.10	F							6.10			
		F		'										
		Ļ												
	1589.74	+7												
		F												
		F												
1/01		F												
- 5/1	1588.74	+8	5											
.GDT		+												
DOT		╞												
N		F												
GPJ	1587 74	Ĺ)											
015D		+												
0079		+												
DOT		F												
NV_L														

						10	0/1/08			EXPL	ORATION	I LOG			
				S	TART DATE	12	/1/90 /1/08							04 00 """	SHEET 1 OF 1
				E	ND DATE		1,1/90	Erooway E	vtonci	on Proio	~ t		STATION	31+00 "P"	
				J	OB DESCRI	PTION			vodo		JL		OFFSET	<u>12.73 KI</u> SDB	
	- Am			LO	OCATION		21,00	Sounty, Nev	aua				ENGINEER	Acker	
	¥.			B	ORING		70_01_4	5		GROU				Peterson	
	The second se			E	.A. #		21 76 () (m)		DATE	DEPTH m	ELEV.m	DRILLING	Augor	
	Ve			G	ROUND EL	EV	01.70 (E	nn Rona Cath		12/1/98	NE		METHOD	 Voc	12/1/1008
				H	AMMER DR	ROP SYS	STEM		eau_	L			BACKFILLED	D	ATE
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE		SCRIPTION		REMARKS
		0.00	А	SPT	1	2		w, PI, Sv			Moist, loos Silty Sand	se to mediu I with estim	im dense, dark ated 30% low p	brown lastic	Bulk sample taken from
		- 0.46			1				+		fines, 60%	fine to coa	arse sand, 10%	fine gravel.	0.0-1.5 meters.
									SM						
	1580.76	<u>+</u> 1													
		-								1.22	Soft com		thorad brown C	ranitio	
		- 1.52									Bedrock.	netery wear	inerea, brown a		
			в	SPT	7	22		w, PI, Sv,							
	1579.76	<u>1.98</u>			11			Sn	4						
		-													
		-													
		-													
	1578.76	3 3.05													
		_	C	SPT	10	16									
		- 3.51			26					3.51					
	1577.76	-4													
		_													
		-													
		-													
	1576.76	-5													
		-													
		-													
		-													
	1575 76	<u> </u>													
		-													
		-													
		-													
	1574 76	— 7													
	107 1.70	-													
		-													
/01		-													
5/11.	1573 76														
GDT	1373.70	-													
DOT.		_													
N		-													
GPJ	1572 76														
015D.	10/2./0	-													
0079(-													
) TO		-													
NV_C															

								2/	24/00			EXPLORATION LOG		
						ST	ART DATE	<u> </u>	24/00					SHEET 1 OF 1
						EN	ND DATE	3/	24/00	_ _		STATION _	30+94 "P"	
						JC	B DESCRI	PTION	1-580	Freeway E	xtensi	n Project OFFSET	3.09 LT	
	.tm					LC	CATION		ashoe	County, Nev	ada	ENGINEER		
	an w	Ľ	610			BC	ORING	03	81+05			EQUIPMENT	JD 792 Tim	
	1 k		K 1			E./	A. #	00	79-01-	5		GROUNDWATER LEVEL OPERATOR _	1 1//1	
		y N				GF	ROUND EL	EV15	686.16 ((m)		DATE DEPTH m ELEV. m DRILLING	Trackhoe	
				ſ∕-	-	HA		OP SYS		١A		BACKFILLED	Yes D	ATE 3/24/2000
	ELEV.		DEPTH		AM	PLE	BLOW C	OUNT	Percent		USCS	MATERIAL DESCRIPTION		REMARKS
	(m)		(m)	NC	J.	IYPE	Increments	300 mm	Recov'd		Group	Moist medium dense to dense brown	to olive	
		-	0.0	21							50	brown, Silty, Clayey Sand with approxi 22% low plastic fines, 77% fine to coar and trace fine gravel.	mately se sand,	
	1585.16	F	1	Δ		RAB				MC SA PL	SM			
		-	1.2	22 '	-						-			
		-												
			1.8	33								1.83		
	1584.16	Ē	2 .	E E	3 0	GRAB				MC, SA, PI		Slightly moist, dense, olive brown, Wel	l	Moderately to
		-	Ζ.	13	-						-	non-plastic fines, 82% fine to coarse sa	ely 12% and, 6%	from 1.8 meters
		-										fine gravel.		to bottom of
		-									sw			noie.
	1502 16		a 3.()5							SM			
	1005.10	F	3	- C	: 0	GRAB					1			
		-	3.3	35 -	-						-			
		-										3.66	0	
		-										Slightly moist, dense, olive brown, Silty with approximately 15% non-plastic fin	/ Sand es, 80%	
	1582.16	T	4									fine to coarse sand, 5% fine gravel.		
		-	4.5	57							-			
		-	4.8	38 C		GRAB				MC, SA, PI	SM			
	1581.16	+	5											
		-												
		-	5.7	79	_						-			
	1580.16	+	6 6.′	10 E		GRAB						6.10		
		-												
		-												
	1579.16	+	7											
		-												
		-												
/01		-												
5/11	1578 16	Ĺ	8											
GDT	1570.10	-	0											
DOT.		-												
		╞												
ΓďΞ		F	_											
15D.(1577.16	t	9											
0620		Ĺ												
0 TC		╞												
D_ N		-												
Z									1	1	1	l		

							- 12	/4/98			EXPLO	ORATIO	N LOG			_	
					S		12	/ <u>4/</u> 90							04.04 "D	s "	SHEET 1 OF 1
					Eľ	ND DATE		1-580	Freeway F	vtoncia	n Proiec	` †		STATION	31+91 "P		
					JC	DB DESCRI	PTION	2500-1 25000		vada				OFFSET	MG		
	- San				LC	DCATION	02	2100	Journy, Nev	aua				ENGINEER	Acker		
	×.	e A	5		B	ORING	0				CDOU				Peterson		
	1	J.			E.	A. #		04 47 () m)		DATE	DEPTH m	ELEVEL	DRILLING	Augor		
	le				G	ROUND EL	EV	194.47 (E	III) Dana Cath		12/4/98	NE		METHOD	Auger		10/4/1000
)			H	AMMER DF	ROP SYS	STEM	tope - Calin	eau_				BACKFILLED		DATE	12/4/1990
	ELEV.	DE	PTH	SAN		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION			REMARKS
	(m)	(m) 0.00	NO.	11156	Increments 6	<u>300 mm</u>	Recov'd		Gioup		Soft. com	pletelv wea	thered. arev Gra	anitic		
		-	0.00	Α	SPT	22	50					Bedrock.					
		_	0.40			20				-							
		+															
	1593.47	+1															
		F															
			1.52							-							
		-	1 00	В	SPT	27 50/127	50/127		w, PI, Sv								
	1592.47	-2	1.90							-							
		-															
		Ę															
		-															
	1591.47	-3	3.05							-							
		Ľ		С	SPT	50	50		w, PI, Sv								
		-	3.51							-							
		-															
	1590.47	+4															
		Ľ															
		-	4.57			14				-							
		-		D	SPT	38	50/127										
	1589.47	-5	5.03			50/127				-							
		Ľ															
		-															
		+															
	1588.47	-6	6.10														
				Е	SPT	33 50/102	50/102										
		-	6.55			00,102					6.55					-	
		-															
	1587.47	† 7															
		F															
÷		+															
5/11/0		-															
DT 5	1586.47	1 8															
OT.G		F															
		+															
1 L L L		+															
15D.G	1585.47	 9															
.0620		F															
0 TC		-															
N_D(+															
~		_						1	1	1	_					1	
							10	0/1/08			EXPLORATION LOG						
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					S	TART DATE	12	2/1/30						SHEET 1 OF 1			
					EI	ND DATE		1,500	Erooway E	vtoncio	n Project	STATION	32+47 "P"				
					JC	DB DESCRI	PTION			vodo		OFFSET					
	an .	al .			LC	DCATION			Jounty, Nev	aua		ENGINEER					
	2 Mart	e	5		B	ORING	03	32+50		r			Peterson				
	4				E.	A. #	0	079-01-	D								
	20				G	ROUND EL	EV15	677.28 (m)		12/1/98 4.57 1572.7	METHOD	Auger				
			\mathcal{T}		H	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_YesD	ATE <u>12/1/1998</u>			
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS			
		_	0.00	^	CDT	4	25		W DI SV		Moist, medium dense	to dense, light	brown				
		-	0.46		JF I	16	20		W, FI, SV		plastic fines, 70% fine	e to medium sa	nd.				
		-								SC							
		-															
	1576.28	+1									1.07 Verv soft to soft, com	pletely weather	ed. arev				
			4 50								Granitic Bedrock.	plotoly noutrol	ou, groy				
		-	1.52	В	SPT	50/127	50/127		w, PI, Sv	-							
		-]							
	1575.28	+2															
		-															
		_															
	1574.28	-3	3.05														
		-	3.35	С	SPT	34 50	50										
		-								1							
	1573.28	-4															
		-															
		+	4 57														
		¥	4.72	D	SPT	50	50			-							
	1572.29	1															
	1372.20	- 5															
		-															
		-															
		-															
	1571.28	-6	6.10)		26				-							
			6.40	E	SPT	50	50				6.40						
		-															
		-															
	1570.28	+7															
		-															
1/01		-															
T 5/1	1569.28	+8															
L'GD'		-															
DO		-															
N		Ĺ															
GP.	1568.28	-9															
015D		ŀ															
6200		+															
DT		+															
		-															

						10	0/1/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	2/1/90						SHEET 1 OF 1
				E	ND DATE	_12	1/90	 Eroowov E	vtonoic	n Project	STATION	<u>33+98 "P"</u>	
				JC	OB DESCRI	IPTION	1-500				OFFSET	69.58 LT	
	- San			L	OCATION		2100	Journy, Nev	aua		ENGINEER	Acker	
	2 Mm			B	ORING		33+25	-	[Peterson	
	The second se			E	.A. #		079-01-	<u>,</u>		GROUNDWATER LEVEL	DRILLING		
	te			G	ROUND EL	EV. 15	82.02 (m)		12/1/98 NE	METHOD	Auger	
				H	AMMER DR	ROP SYS	STEM _ Н	Rope - Cath	ead		BACKFILLED	Yes D	ATE <u>12/1/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.0	A	SPT	3	24				Soft, completely weat Bedrock	hered, grey Gra	anitic	Bulk sample taken from 0 -
		- 0.4	6	_	17				_				1.6 meters.
		-											
	1591 02	Ĺ,											
	1301.02	Γ'											
		1.5	2										
		-			21			51.0	-				
		1.9	8 B	SPT	43	85		w, PI, Sv					
	1580.02	-2											
		-											
		-											
	1579.02	<u>-3 3.0</u>	5		10				-	Iron oxidation with sli	nht clav alteratio	าก	
			С	SPT	23	47		w, PI, Sv		Possible shear zone.	grit olay alterativ	511.	
		- 3.5	1		24				-				
		-											
	1578.02	-4											
		-											
		4.5	7										
			D	SPT	7 14	33				Purplish grey color wi	ith alteration to	clay	
	1577.02	-5 5.0	3		19					minoralogy to 4.2 mo			
		-											
		-											
	1576.02	-6 6.1	0										
	-	-	_	0	20				1				
		6.5	5 E	SPT	50	50							
		-]				
	1575.02	_ 7											
	.010.02	·											
		F											
01		_ 7.6	2		12				_				
5/11/	4574.00	-	F	SPT	28	67				0.00			
BDT	1574.02	8 8.0	5		39					8.08			
OT.G		-											
		F											
1 L HE		-											
15D.G	1573.02	-9											
7901													
T 00		F											
DO		-											
ź				1	1								

ſ							2/	24/00			EXPLORATION LOG	
					ST	FART DATE	<u> </u>	24/00				SHEET 1 OF 1
					El	ND DATE	3/.	24/00			STATION <u>33+99 "P"</u>	
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	OFFSET 8.95 RI	
	.tm				LC	OCATION		ashoe	County, Nev	/ada	ENGINEER ID 702	
	2Mm	e la			BC	DRING	03	34+00			EQUIPMENT <u>JD 792</u>	
	4		/		E.	A. #	00)79-01-	5		GROUNDWATER LEVEL OPERATOR	
	že				GI	ROUND EL	EV15	572.12 ((m)		J/24/00 NF METHOD Trackhoe	
					HA	AMMER DR	OP SYS	STEM	IA		BACKFILLED Yes DA	TE3/24/2000
ľ	ELEV.	DEP ⁻	TH -	SAN NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		- - -).91			Increments	<u>300 mm</u>	Recova		SM	Very moist, loose to medium dense, dark brown to dark grey, Silty Sand with approximately 17% non-plastic fines, 81% fine to coarse sand, and trace fine gravel.	
	1571.12	-1	22	А	GRAB				MC, SA, PI	1	4.00	
			.22								1.22 Wet, medium dense, dark grey, Silty Sand	
		-	.83							SM	with approximately 20% non-plastic fines, 72% fine to coarse sand, 8% fine to coarse gravel.	
	1570.12	-2 2	2.13	В	GRAB				MC, SA, PI		2.13	
	1569.12	- - - - - - -									Groundwater encountered at 1.8 meters.	Trench caved below groundwater table immediately after excavation.
	1568.12	4 - - -										
	1567.12	5 - - - 6										
	1565.12	- - - - - 7 -										
J NV_DOT.GDT 5/11/01	1564.12	- - - - - -										
NV_DOT 0079015D.GP	1563.12	9 - - -										

							10	2/1/02			EXPLOR/	ATION	LOG			
					S	TART DATI	12	./ 1/30 //1/00								SHEET 1 OF 1
					EI	ND DATE	12	11/90		vtona	n Droiget			STATION	34+15 "P"	
		/			JC	OB DESCR	IPTION	1-580	Freeway E	xtensi	on Project			OFFSET	<u>55.68 R1</u>	
	-				LC	OCATION		asnoe	County, Ne	/ada				ENGINEER	<u>SDB</u>	
	1 MM	2	5		B	ORING	03	84+20			[]	EQUIPMENT	Peterson	
	Ž		<1		E.	.A. #	00)79-01-	5		GROUNDV	VATER	LEVEL	OPERATOR		
	n an	٦.			G	ROUND EL	.EV15	67.08 (m)		DATE DEF 12/1/98 0	PTH m	ELEV. m	METHOD	Auger	
				1	н	AMMER DF	ROP SYS	STEM_F	Rope - Cath	ead			1000.2	BACKFILLED	_Yes DAT	re <u>12/1/1998</u>
				SAI	MPLE	BLOW C	OUNT									
	ELEV. (m)	DE	:PIH (m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MATE	RIAL DE	SCRIPTION		REMARKS
		L	0.00	Δ	ерт	3	11				Moi	ist to we	et, medium	dense to loose	, dark	
		_	0.46	~	351	5			W, FI, SV		non	n-plastic	fines, 80%	6 fine to coarse	sand.	
		-														
	7	Ł														
	1566.08 -	 †1														
										SM						
		-	1.52			2				-						
		F		В	SPT	3	8		w, PI, Sv							
	1565.08 -	-2	1.98			5				-						
		F														
		F									2.44 We	t loose	arev to bl	ue arev Silty Sa	and with	
		F									esti	imated	30% non-p	lastic fines, 70%	6 fine to	
	1564.08 -		3.05								coa	arse sar	nd.			
	1304.00					5			51.0	SM						
		F	3.51	C	SPT	9	26		w, PI, Sv							
		F									0.04					
		F									3.81 We	t. verv o	dense. arev	/ brown Silty Sa	and -	
	1563.08 -	-4								SC	Cla	iyey Sai	nd with est	mated 20% nor	n-plastic	
		Ľ								SM	to lo	ow plas	tic fines, 79 avel.	5% fine to coars	se sand,	
		_	4.57			20					4.57			0.14.	One distribution	
		F		D	SPT	40	73		w, PI, Sv		esti	imated	10% non-p	lastic fines, 80%	6 fine to	
	1562.08 -	-5	5.03			33				-	coa	arse sar	nd, 10% fin	e gravel.		
		F														
		F														
										SM						
	1561.08 -	-6	6.10													
		-		_		22				1						
		F	6.55	E	SPT	32 40/127	40/127									
		-								1						
	1560.00	† _									0.86 Ref	fusal on	granitic bo	oulder.		
	190.09-	\Box'											3.5			
		L														
-		F														
11/0		F														
Π 5/	1559.08 -	-8														
T.GD		F														
Ö		F														
N		Ľ														
GPJ	1558.08 -	Ĺ														
015D	1000.00	- 3														
)079(F														
OT (F														
Ď >		╞														
z		1		1	1	1	1	I	1						1	

							. 12	/1/98			EXPLORATION	I LOG			
					s -		12	2/1/98							SHEET 1 OF 1
					E	ND DATE		1-580	Freeway F	vtonsir	n Project		STATION	34+// "P"	
					JC	DB DESCRI	PTION			vodo			OFFSET	SDR	
	- Arr				LC	OCATION		4.50	Journey, Nev	aua			ENGINEER	Acker	
	1 And	6	3		B	ORING	0	70.04	-					Peterson	
	4				E.	A. #		079-01-5	<u>,</u>			LEVEL ELEV m	DRILLING		
	2c				G	ROUND EL	EV15	81.67 (m)		12/1/98 3.90	1577.8	METHOD	Auger	
					H	AMMER DR	OP SYS	STEM _	tope - Cathe	ead			BACKFILLED	_YesDA	TE 12/1/1998
	ELEV.	DEF	тн	SAN	MPLE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	МАТЕ		SCRIPTION		REMARKS
	(m)	n)	1) 0.00	NO.	TYPE	Increments 2	300 mm	Recov'd		Group	Soft com		bered light bro	wn	
		-	0.00	А	SPT	19	50/127				Granitic B	edrock.	increa, light bio	vvii	
		-	0.46			50/127				-					
	1580.67	-1													
		+													
		-	1.52	_	077		50/1			-					
		-	1.68	В	SPT	50/127	50/127			-					
	1579.67	-2													
		-													
		-													
		-													
	1578.67	3	3.05												
	10/0.0/	-		~	ODT	24	67								
		-	3.51	C	501	35	57		W, PI, SV						
		-													
	1577.67	Į.													
	1577.07	4													
		-	4 57												
		-	4.57	D	SPT	35/64	35/64			_					
	4570.07	-													
	15/6.6/	5													
		_													
		-													
		-													
	1575.67	-6	6.10 6.25	F	SPT	50/127	50/127			-	6.25				
		_	0.20	<u> </u>		30/12/	50/12/				0.23				
		_													
		-													
	1574.67	-7													
		-													
11/01		_													
Ч 5/-	1573.67	-8													
T.GD		F													
DO		t													
NN r		F													
D.GP.	1572.67	-9													
9015[F													
3200		F													
DOT		t													
N															

					-		. 12	0/2/98			EXPLO	ORATIO	N LOG			
					ST		: <u>12</u> 12	/2/QR								SHEET 1 OF 1
					E			12130 1_520		vtenci	n Projec	` †		STATION	35+59 "P"	
					JC	DB DESCRI	PTION			vodo		<i></i>		OFFSET	MG	
	14				LC	DCATION		25+60		aua					Acker	
	Kur	e	9		BC	ORING		70_01_4	5		GROUI				Peterson	
	1 miles				E.	A. #	16	73 71 (5 m)		DATE	DEPTH m	ELEV.EL	DRILLING		
					GI	ROUND EL	EV	573.71 (F	Pope - Cath		12/2/98	0.00	1573.7	METHOD		12/2/1008
		/			HA	AMMER DR	OP SYS	STEM						BACKFILLED	DA1	TE
	ELEV. (m) ⁵		PTH m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
	()	<u> </u>	0.00	Α		Increments	500 1111	ILECOV U	w, PI, Sv			Wet, loos	e to mediun	n dense, light gi	reenish	
		_										medium p	ey Sand wit lastic fines,	n estimated 25% 75% fine sand.	% Grass	
		-										roots to 0	.24 meters.			
		-														
	15/2./1	1														
		_	1 52							SC						
		-	1.02	-		3	_		w. Pl. Sv.	1						
		-	1.98	в		3			Sh							
	15/1./1		2.13	С					w, PI, Sv							
		_														
		-									2.74					
		-	3.05									Wet, med	ium dense,	greenish blue	Silty Sand	
	15/0./1		5.05	р		20	45			SM		80-85% fi	ne sand.	% siignuy piasu	c intes,	
			3.35			45										
		-									3.66	Mat mad	ium danaa	arean blue Cla	vov Cond	
	4500 74	-										with estim	ium dense, iated 30% r	nedium plastic f	ines, 70%	
	1569.71	4										fine sand.	Interbedde	d silty sand.		
		-	4 57													
		-	4.57	E						-						
	1560 71	-														
	1300.71	_ 5								SC						
		-														
		-														
	1567 71	6										Highly inte	erbedded w	ith silty sand.		
	1507.71	_ 0														
		_	6.40	F							6.40					
		-														
	1566 71	-7														
	1000.71	-														
		-														
01		-														
5/11/	1565 71	8														
GDT	1565.71	_ 0														
DOT.(_														
NV_L		-														
GPJ	1564 74	-														
015D.	1004./1	-9														
0079(-														
D TOC		-														
NV_L		-														

							. 13	0/2/08			EXPLORATION LOG	
					S	TART DATE	12	0/2/08			00.00 "	SHEET 1 OF 1
					EI	ND DATE		1 5 90	Erooway E	vtonci	STATION $36+30$ "P"	
		/			JC	DB DESCRI	PTION	1-000		xtensi	OFFSET 69+61 LT	
	- mark				LC	OCATION		asnoe	Jounty, Nev	ada		
	2 Mrt		5		B	ORING	03	36+50				
	Z				E.	A. #	0	079-01-	D		GROUNDWATER LEVEL OPERATOR	
	Ž.	./			G	ROUND EL	EV15	587.91 (m)		12/2/98 0.15 1587.8 METHOD HQ Core	
			<i>. ` ` `</i>	1	H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead	BACKFILLED Yes DAT	E 12/2/1998
	FI FV	П	FPTH	SA	MPLE	BLOW C		Dereent		USCS		DEMARKO
	(m)		(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB IESIS	Group	MATERIAL DESCRIPTION	REMARKS
	1586.91	¥ - - - 1	0.00	B					w, PI, Sv, Sh	-	Wet, loose to medium dense, light greenish grey Silty Sand with estimated 30% low plastic fines, 70% fine sand. Grass roots to 0.24 meters.	
		-								SM		
		-	1.83	3								
	1585 91	Ē	,			3				1		
	1000.01	-	2.29			67	13					
		-										
		-									2.74	
		F									Wet, medium dense, greenish blue Silty Sand	
	1584.91	Ľ	i							SM	75% fine sand.	
		-	3.35	5		1						
		-		D		8	13		w, PI, Sv		3.66	
	1583.91	4 	3.81			5				-	Wet, medium dense, green blue Clayey Sand with estimated 30% medium plastic fines, 70% fine sand. Interbedded silty sand.	
	1582.91	- 	4.88	B E					w, PI, Sv	sc		
	1581.91	- - - -	6.40) F							Highly interbedded with silty sand.	
	1580.91	7										
VV_DOT.GDT 5/11/01	1579.91	- - - -	;									
NV_DOT 0079015D.GPJ 1	1578.91	- - - - -										

							_ 10	2/10/08			EXPLO	ORATIO	N LOG			
					S	TART DATE	12	2/10/08							07 00 "D"	SHEET 1 OF 1
					E	ND DATE		1 590		vtoncio	n Proioc	~+		STATION	37+02 "P"	
					JC	OB DESCR				vodo		<i>.</i>		OFFSET	<u>- 5.59 K I</u>	
	Sm				LC	OCATION			county, Nev	aua				ENGINEER	 Acker	
	2 MM	e	5		B	ORING		70.04	-	r					Peterson	
	4				E.	A. #		79-01-					ELEVEL	DRILLING		
	2	\checkmark			G	ROUND EL	EV15	o//.66 (<u>m)</u>	İ	DATE			METHOD	Auger	
)			H.	AMMER DF	ROP SYS	STEM	Rope - Cath	ead				BACKFILLED	YesD	ATE
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		ΜΑΤΙ	ERIAL DE	SCRIPTION		REMARKS
		_	0.00	А	SPT	5	13		w. Pl. Sv	SM	0.15	Dark brow	n Top Soil . brown Sa	ndv Clav		
		-	0.46			8			, , -	CL		inelet, etc.	,			
		-									0.76					
	1576 66											Dry, very	dense, light	brown Silty Gra	avelly	
	1576.00	Τ'										Sand Com	iposed of g	ranilic material.		
		_	1 52													
		-		_	0.07	26			51.0	SM						
		-	1.98	в	SPT	23 32/51	32/51		w, PI, Sv							
	1575.66	-2								1	2.20					
											2.29	Moist, ver	y stiff, light	olive Sandy Cla	ıy.	
		-											, , ,	-		
		-								CL						
	1574.66	-3	3.05			12					3.11					
			0.54	С	SPT	23	58		w, PI, Sv			Soft, redd	ish brown te v weathere	o tan and grey, d Granitic Bedr e	ock.	
		-	3.51			35				-			,			
		_														
	1573.66	<u>+</u> 4														
		-														
		_	4.57													
		_		D	SPT	6 25	50									
	1572.66	-5	5.03			25					5.03					
		-														
		-														
	1571.66	-6														
		-														
		-														
		-														
	1570.66	17														
	1370.00	[
		-														
5		-														
5/11/0		-														
DT	1569.66	-8														
OT.G																
		-														
PJ N		-														
5D.G	1568.66	+9														
7901		Ē														
Т 00		F														
_D0		-														
ź																

					_		10	2/10/08			EXPL	ORATIO	N LOG			
					ST	ART DATE	11	2/10/08								SHEET 1 OF 1
					EN	ND DATE		1 500		vtonoi	on Broio	ot		STATION	<u>38+60 "P"</u>	
					JC	B DESCR	IPTION	1-000		xtensi	JITFIOJE			OFFSET	<u>0.11 RI</u>	
	500				LC	OCATION		asnoe	County, Nev	ada				ENGINEER	Acker	
	2 Mrd				BC	DRING		38+60	-]		Peterson	
	Z.				E.,	A. #		079-01-	5				LEVEL			
	te				GF	ROUND EL	EV15	575.21 ((m)		DATE	DEFINI		METHOD	HQ Core	
					HA	AMMER DF	ROP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesD	ATE <u>12/10/1998</u>
	ELEV. (m)	DEPTH (m)	H N	SAN IO.	/IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DI	ESCRIPTION		REMARKS
		0.0	00	A					w, PI, Sv			Moist, stiff	i, brown Sa	ndy Clay with e	stimated	
		-										sand. Min	or gravel.	s, 45 % very line		
		0.6	51	в					w, PI, Sv,	СН						
	4574.04	- 0.9	91	c						-						
	1574.21	-1									4.04					
		- 15	52								1.31	Moist to w	et. mediun	n dense, brown	Silty Sand	
		-		Ð					w, PI, Sv	-		with estim	ated 25% I	non-plastic fines	s, 75% fine	
		-										to coarse clayey sar	sand. Inter 1d lenses.	bedded thin clay	y and	
	1573.21	-2								SM						
		2.4	14	_												
		_		E						1						
		-									2.90					
	1572.21	-3										Wet, medi	ium dense,	grey Silty Sand	d with	
		-										fine to me	dium sand.	Interbedded po	oorly graded	
												sand and	clayey san	d lenses.		
		-														
	1571.21	-4 3.9	96	F						-		Medium p	lastic clav	ense.		
		-														
		-								SM						
	1570.21	-5														
		-														
		- 5.4	19	G						-						
	1569.21	6 6 1	10								6 10					
		-		H							0.10					
		-														
		-														
	1568 21	_ 7														
	1000.21	'														
		-														
10		-														
5/11/	4507.04	-														
DT	1567.21	8														
OT.C		F														
		-														
- L H E		+														
15D.C	1566.21	-9														
0620		Ļ														
DT O		F														
N_D		-														
2							1	1	1	1						

					-		. 10	1/25/99			EXPLORATION LOG			
					S		10	/25/99					00.00 "D"	SHEET 1 OF 2
					EI	ND DATE		1-580	Ereeway E	vtonci	n Project	STATION	<u>39+39 "P"</u>	
					JC	DB DESCRI	PTION		County No.	vodo		OFFSET	MG	
	24				LC	OCATION			Sounty, Nev	aua		ENGINEER	Acker	
	N. N	e	5		B	ORING	0	9742	_				Peterson	
	4 m				E.	.A. #		79-01-)		DATE DEPTH m ELEV m	DRILLING		
	2e				G	ROUND EL	EV15	70.86 (m)		10/26/99 2.80 1568.1	METHOD	HQ Core	
			77		H	AMMER DR	OP SYS		Rope - Cath	ead		BACKFILLED	_YesDA	TE <u>10/30/1999</u>
	ELEV. (m)	DE (PTH m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_									Slightly moist, very de	ense, brown Cla	k medium	
		-								SC	plastic fines, variable	sand and grave		
		-	0.61	A					w, PI, Sv	-	0.76			
		F.									Moist, dense, brown	grey Clayey Gra	velly	
	1569.86	+1									fines 65% fine to coa	20% medium pl arse sand 15%	astic	
													gravon	
		-								SC				
		-												
	1568.86	<u>+</u> 2												
		F	2 11								2.29	at alightly as ma	ntod Ciltu	
			2.44	В					w, PI, Sv	1	Gravelly Sand. Varia	ble gradation.	anted Sitty	
	7	Ý										-		
	1567.86	—з												
		+								SM				
		-												
		F												
	1566.96	Ĺ,												
	1300.00	- 1									4.27			
		-									Moist to wet, very der	nse, brown grey	Silty	
		-									Gravelly Sand. Few s	small cobbles.		
		F												
	1565.86	-5												
		Ľ												
		L												
		-												
	1564.86	-6												
		F												
		F												
		Ľ												
	1563.86	- 7	7.01							4				
		F		С	SPT	21	50/102							
			7.47	'	ļ	50/102				4				
01		F												
5/11/	1560.00	Ŀ.												
DT	1562.86	– 8												
OT.G		Ļ								511				
		╞												
1 Ld		╞												
5D.G	1561.86	+9												
7901		Ľ									Possible ground wate	er below 9.14 m	eters.	
T 00		F												
DO		F												
Ň														

[10	1/25/00			EXPLORATION LOG			
				ST	ART DATE	10	1/25/99						SHEET 2 OF 2
				EN	ID DATE		1/25/99				STATION	39+39 "P"	
				JC	B DESCRI	PTION	1-580		xtensic	n Project	OFFSET	6.03 RT	
	24	~		LC	CATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
	2MM			BC	DRING	03	9+42 		(EQUIPMENT	Peterson	
	- A			Ε.	A. #	00	079-01-5)					
	ž.			GF	ROUND EL	EV. 15	570.86 (m)		10/26/99 2.80 1568.1	METHOD	HQ Core	
				HA	MMER DR	OP SYS	STEM R	tope - Cathe	ead		BACKFILLED	_YesD	ATE
ľ	ELEV.	DEPTH	SAM	MPLE	BLOW CO		Percent		USCS				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD ILSIS	Group				REMARKS
		-											
		-											
	1559.86 -	-11											
		-											
		-											
		-											
	1558.86 -	12											
	1000.00	_ 12								12.19			
		-											
		-											
	4557.00	-											
	1557.86 -	-13											
		_											
		-											
		-											
	1556.86 -	14											
		_											
		-											
		-											
	1555.86 -	- 15											
		_											
		-											
	1554.86 -	-16											
		-											
		L											
		_											
	1553.86 -	-17											
		-											
11/01		-											
T 5/1	1552.86 -	-18											
T.GD		-											
D		-											
2 ∩		[
O.GP.	1551.86 -	-19											
9015[_											
\$200		-											
DOT		Ľ											
N													

					_		Q/	1/00			EXPL	ORATIO	N LOG			
					ST	FART DATE	<u> </u>	1/00								SHEET 1 OF 1
					EN	ND DATE		1,55	Ereeway E	vtonci	on Projec	~ t		STATION	<u>39+63 "P"</u>	
					JC	DB DESCRI	PTION	1-000		vodo	JITFIOJE	JL		OFFSET	209.14 KT	
	n.				LC	DCATION				aua				ENGINEER	 	
	5 Mm				BC	ORING			-02) -						-	
	4	\geq			Ε.	A. #)/9-01-:))				ELEVEL	DRILLING		
	le				GI	ROUND EL	EV15	55.79 (<u>m)</u>		9/1/99	NE		METHOD		
			N		HA	AMMER DR	OP SYS		IA					BACKFILLED	Yes DA	TE9/1/1999
	ELEV. (m)	DEPTH (m)	I N	SAN IO.	IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		ΜΑΤΙ	ERIAL DE	ESCRIPTION		REMARKS
		0.1	8							SP	0.18	Dry, loose	e, grey Poo	rly Graded San	d with Silt	
		0.4	1 2	2A	GRAB					SC	0.40	to coarse	sand, and	5% fine gravel.	Weathered	
		0.6	51						DL O.	SIVI		decompos Moist, loos	sed granite se. dark bro	material. own Silty. Clave	ev Sand	
	4554 70	- 0.9	91 4	B I	GRAB	8			PI, SV	ML		with estim	ated 25% I	ow to non-plast	ic fines,	
	1554.79	1.2	22								1.22	subangula	to coarse sa ar gravel.	and, and 10% fi	ne	
		- 15	2 2	2C	GRAB	5			PI, Sv			Moist, loo	se, light bro	wn Sandy Silt	with 61%	
		-								sw		sand. Un	it contains i	nterbedded sar	nd and silt	
		-								SM		beds alon	g with scatt	ered wood debi	ris. Sand	
	1553.79	-2									2.13	Moist, loo	se to mediu	im dense, light	brown to	
												brown We non-plasti	c fines. 86%	Sand with Silt w 6 fine to coarse	sand. and	
		2.5	59	_						SP		4% fine gr	ravel. Unit	contains severa		
		- 2.9	200	2D	GRAB	8			PI, Sv	30		beds, vari	able unit.	ecomposed grar	lite product)	
	1552.79	-3									3.05	Moist, me	dium dense and with Si	e, yellow-brown	Poorly % low	
												plasticity f	ines, 86% i	ine to coarse sa	and, and	
												3% fine gr	ravel. Unit sed granite	is derived from and contains se	everal	
		-										dense lay	ers.			
	1551.79	-4										deposited	by fluvial p	rocesses.	Area	
		-														
		Ľ														
		_														
	1550.79	-5														
		-														
		-														
	1549.79	-6														
		-														
		-														
		-														
	1548 79	7														
	10 1011 0	F.														
		-														
0		-														
5/11/	4547 70															
5DT	1547.79	-														
OT.C		-														
 ∧		-														
1 Lđế		-														
15D.C	1546.79	-9														
2790		[
7T 00		-														
		-														
z		1						1	1	1						

						10	/25/00			EXPLORATION LOG			
				S	TART DATE	10	120/99						SHEET 1 OF 2
				El	ND DATE		1/26/99				STATION	39+89 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	n Project	OFFSET	10.49 LT	
				LC	OCATION	W	ashoe (County, Nev	vada		ENGINEER	MG	
	Mar	C I		В	ORING	03	9+80				EQUIPMENT	Acker	
	- TA			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	in the			G		_{FV} 15	71.67 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				С Ц				Rope - Cathe	ead	10/26/99 NE		Yes	TE 10/30/1999
						UP 313					BACKFILLED	D/	
	ELEV.	DEPTH	SA NO.	MPLE TYPE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	. ,	- - 0.61	A					w, Pl, Sv	_	Moist, very dense, br Sand - Silty Sandy G non-plastic to slightly to coarse sand, 35-4 Abundant surface col	own grey Silty (ravel with 15% plastic fines, 40 5% fine to coars obles and bould	Gravelly D-50% fine se gravel. ers.	
	1570.67	<u>+1</u>											
	1569.67	- - - -											
		-											
	1568.67	- 											
	1567.67	- 3.66 - 3.81 - 4 -	B	SPT	50/102	50/102			SM				
	1566.67	- - 5 5	³ c					w, PI, Sv	-				
	1565.67	- - 6											
	1564.67	- - 7 -											
DT.GDT 5/11/01	1563.67	- - 								8.23 Wet, very dense, red	to rust brown S	ilty	
OT 0079015D.GPJ NV_D(1562.67	- - - - -								Gravelly Sand with e to slightly plastic fines percentages. Minor la cobbles.	stimated 20% n s, variable sand arge gravel and	on-plastic and gravel small	
NV_D(_											

						10	/25/00			EXPLORATION LOG			
				SI	ART DATE		/25/99						SHEET 2 OF 2
				E١	ND DATE	_10	/26/99				STATION	39+89 "P"	
				JC	B DESCRI	PTION	I-580	Freeway E	xtensio	n Project	OFFSET	10.49 LT	
				LC	OCATION	W	ashoe (County, Nev	ada		ENGINEER	MG	
	20M	C .		BC	DRING	03	9+80				EQUIPMENT	Acker	
	Ĩ			Е.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	in the			GI		_{FV} 15	71.67 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				ц.				ope - Cathe	ead	10/26/99 NE		Yes DA	те 10/30/1999
								•	L		DAGINI ILLED	Dr	
	ELEV.	DEPTH (m)	NO.	TYPE	150 mm	Last	Percent	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	()	(,			Increments	300 1111	Kecov u						
		_											
		-							SM				
		_											
	1560.67 -	-11											
		-											
		-											
		-											
	1550.67	_ 12											
	1559.07												
		_											
		-											
		-								12.80			
	1558.67 -	-13											
		-											
		-											
	1557.67 -	-14											
		-											
		-											
		-											
		-											
	1556.67 -	- 15											
		_											
		_											
		-											
	1555.67 -	-16											
		-											
		F											
		F											
	1554.67 -	17											
	1004.07	''											
		F											
Σ		F											
/11/0		F											
<u>ЭТ 5,</u>	1553.67 -	- 18											
T.GI		F											
л Л		_											
C.GP.	1552.67 -	- 19											
015L		-											
0079		-											
Ď		F											
		-											

				_		. 10	2/10/02			EXPL	ORATIO	N LOG			
				S		12	0/10/00							40.04 ****	SHEET 1 OF 1
				El	ND DATE	_12	1 500	Eroowov F	vtonoi	n Droia	ot		STATION	40+01 "P"	
				JC	DB DESCRI	PTION	1-000			n Pioje			OFFSET	<u>8.85 KI</u>	
	2.5			LC	OCATION			Journey, INE	aua				ENGINEER	Acker	
	2 Mart			B	ORING	04]		Peterson	
	4			E.	A. #		079-01-	D					DRILLING		
	Ĩ.			G	ROUND EL	EV15	o/1.44 (m)		DATE	DEFITTI		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesDA	TE <u>12/10/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		ΜΑΤ	ERIAL DI	ESCRIPTION		REMARKS
		0.00	A					w, PI, Sv			Hard volc	anic cobble	s in weathered, natrix	brown	
		-									grateran				
		-													
	1570 44														
	1370.44	-													
		1.37	В					w, PI, Sv	-						
		-													
		-													
	1569.44 -	<u>_</u> 2									Matrices	man and af	!		
		_									Matrix co	mposed of	sandler material	l.	
		-													
		- 2.90	С												
	1568.44 -	-3													
											Matrices	ntaina hinh		lau finan	
		_									Matrix co	ntains nign	percentage of c	lay lines.	
		-													
	1567.44 -	-4													
		4.42													
		_								4.57	0.11				
		-									Sitty Grav	velly Sand v	lith small coddle	es.	
	1566.44 -	-5 5.18							SM						
			E							- 10					
										5.49	Cobbles a	and boulder	s with little siltv	sand	
		_									matrix.		,		
	1565.44 -	6 6.10	F							6.10					
		-													
		Ľ													
		L													
	1564.44 -	-7													
		-													
		-													
1/01															
5/1	1563.44 -	-8													
.GDT		-													
DOT		-													
N		F													
GPJ	1562.44	Ĺα													
015D	1002.44														
0079		-													
ĎT		F													
NV_C		<u> </u>													

						<u>م</u> /	28/08			EXPLORATION LOG			
				ST		<u> </u>	28/08					44 . 40 """	SHEET 1 OF 1
				E١	ND DATE		20/30		vtencia	n Project	STATION	41+13 "P"	
				JC	DB DESCRI	PTION			vodo		OFFSET	MG	
	- Arr			LC	DCATION			Journy, Nev	aua		ENGINEER	Acker	
	2 Mr. M			BC	ORING	04		-	[Peterson	
	4	\geq		Ε.	A. #		079-01-	D		DATE DEPTH m ELEVEL	DRILLING		
	2u			GI	ROUND EL	EV15	91.14 (<u>m)</u>	I	9/28/98 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM	Rope - Cathe	ead		BACKFILLED	Yes DAT	E9/28/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.00	A						СН	Moist, very stiff, dark Clay with estimated 5	brown Sandy G 0-60% high pla	stic fines,	
		_								Surface boulders to 3	meters in diam	eter.	
		- 0.91								Moist, dense to very of Gravelly Sand with es	dense, brown C stimated 20-309	layey % low to	
	1590.14 -	-1	в					w, PI, SV	SC	medium plastic fines,	40% fine to coa	arse sand,	
		-								30-40% gravel. Few r	hard voicanic co	DDIES.	
		- 1.52 -	С						_	Moist, dense, brown g	grey Silty Grave	ally Sand	
		_								fine to coarse sand, 2	25-45% fine to c	, 40-60%	
	1589.14 -	-2								gravel. Hard volcanic	cobbles compr	ise up to	
		- 2.29	D										
		-											
		_											
	1588.14 -	-3											
		-											
		_ 3.44	E						-				
		Ľ							SM				
	1587.14 -	-4											
		4.21	F						_				
		4.57											
		-	G						-				
	1586 14 -	-5											
		- 5.27	L										
		-											
		-											
	1505 14	6 6 40								0.40			
	1000.14	-0 6.10								0.10			
		-											
		-											
	1504 4 4	-											
	1004.14 -	[′											
		-											
Ξ		_											
5/11/C		+											
DT 5	1583.14 -	8											
OT.G		_											
⊇ 		-											
∠ Ld		-											
5D.G	1582.14	-9											
7901.		Ĺ											
T 00		Ļ											
DO_		-											
ź							<u> </u>						

				~		Q/ [,]	26/98			EXPLORATION LO	G		
				S		= q/	26/98					11,00 ""	SHEET 1 OF 1
				E			1-580	Freeway F	xtensi	n Proiect	STATION	41+83 "P" 18 20 PT	
				JC	DB DESCRI	PTION	2500		vada		OFFSET	NG	
	An .			LC	DCATION		11180	Sounty, Nev	aua			Acker	
	N.M.W.			B	ORING		70 01 1					Peterson	
	17 miles			E.	A. #		70 20 /) m)			<u>/ m</u> DRILLING		
	Ve			G	ROUND EL	EV13	0/ 9.20 (г	III) Dana Cath		9/26/98 NE	METHOD		0/26/1008
				H	AMMER DR	OP SYS	STEM _	tope - Califi	eau		BACKFILLED	DA [·]	TE
	ELEV.	DEPTH	SA		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIA	L DESCRIPTION		REMARKS
	(m)	(m)	A		Increments	<u>300 mm</u>	Recov'd	w, PI, Sv	Gioup	Moist, hard, broy	wn Clavev Sandv Gra	avel with	
		- 0.00	^							40% high plastic	fines, 20% fine to c	barse sand,	
		0.61	Б							40% gravel. Vol	canic cobbles compr	ISE 30-50%	
		_	Б					W, FI, 3V					
	1578.20 -	-1											
		-											
		1.52	c c					w, PI, Sv	-				
									60				
	1577.20 -	-2 2 13											
		-	D						-				
		-											
	1576.20 -	-3											
		-											
		-											
		- 3.66	E							3.66			
	1575.20 -	4											
		-											
		-											
		-											
	1574 20 -	5											
	101 1120	-											
		-											
		-											
	1573.20 -	-											
	15/ 5.20	-											
		-											
		-											
	1572.00	7											
	1372.20 -	[
		F											
01		F											
5/11/	4574.00	-											
DT (1571.20 -	8											
DT.G		Ļ											
NV_D		F											
1 L HE		-											
15D.G	1570.20 -	9											
0620		[
DT 0(F											
N_D(F											
Z		1	1	1		1	1	1	1	1			

						. 9/ [.]	26/98			EXPLORATION LOG			
				S		<u> </u>	26/98						SHEET 1 OF 1
				Eľ	ND DATE		1-280	Ereeway E	vtonci	n Project	STATION	42+22 "P"	
				JC	DB DESCRI	PTION					OFFSET	 MG	
	- Arr			LC	DCATION			Journy, Nev	aua		ENGINEER	Acker	
	S. And			B	ORING	04		_				Peterson	
	4	\gtrsim		E.	A. #		079-01-0	、 、		GROUNDWATER LEVEL	DRILLING		
	2u			G	ROUND EL	EV15	92.34 (m)	<u> </u>	9/26/98 NE	METHOD	HQ Core	
			N	H	AMMER DR	OP SYS	STEM _ R	Rope - Cathe	ead		BACKFILLED	Yes DA	TE <u>9/26/1998</u>
	ELEV.	DEPTH	SA NO		BLOW Co 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m) 0.00) A		Increments	<u>300 mm</u>	Recov'd		Cioup	Moist, very dense, br	own Silty Sand	y Gravel	
	4504.04	-								with highly variable g cobbles and boulders mass. Surface bould diameter.	radation. Hard comprise 70% ers to 3 meters	volcanic of soil in	
	1591.34 -	1											
		- 1.52 - -	B					w, Pl, Sv	_				
	1590.34 -	-2											
		-											
	1589.34 -	-3 3.05	, C						GM				
	1588.34 -	- - - - -											
	1587.34 -	- 4.57 	, Đ						-				
	1586.34 -	- - - 6 6.10) E							Sandy Clay lense 20 thin silty sand lenses 6.10	cm. thick surro	unded by	
1	1585.34 -	- - - - -											
NV_DOT.GDT 5/11/0	1584.34 -	- - 8 - -											
NV_DOT 0079015D.GPJ	1583.34 -	- - - - -											

						- 9/ [.]	27/98			EXPLORATION LOG		
				5		=	27/08				40 70 "D "	SHEET 1 OF 1
				E	ND DATE		1 5 2 0	Eroowov E	vtonci	STATION	42+79 "P"	
				JC	DB DESCRI	PTION	<u>1-500</u>		xtensi	OFFSET	3.81 KI	
	.54			LC	DCATION			Jounty, Nev	ada	ENGINEER	Acker	
	2Mm			BC	ORING	04	3+00				Peterson	
	Ą			Ε.	A. #	00	079-01-8	5		GROUNDWATER LEVEL OPERATOR		
	ž.			GI	ROUND EL	EV15	685.80 (m)		9/27/98 NE METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM	Rope - Cathe	ead	BACKFILLED	Yes DAT	re <u>9/27/1998</u>
		DEDTU	SA	MPLE	BLOW C	OUNT	_		11000			
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DESCRIPTION		REMARKS
		0.00	A					w, PI, Sv		Moist, very stiff to hard, red brown San	dy Clay	
		_							СН	to medium sand. Variable gravel, cobb	les and	
		0.61	в					w, PI, Sv,	-	0.70 boulders. Surface boulders to 2.5 mete	ers.	
		-						511		Moist, very dense, brown Clayey Sand	y	
	1584.80	+1							SC	20-40% medium to high plastic fines, 2	20-60%	
		1.22	C					w, PI, Sv	GC	fine to coarse sand, 20-40% gravel. Co	obbles	
		1.52	D							1.52 common.	alavav	
										sand matrix. Cobbles and boulders set in a	nprise up	
	1583.80 ·	-2								to 90% of soil mass.	1	
		-										
		-										
		-										
		- 2.05								Clayey Sand lense.		
	1582.80	3 3.05	E							3.05		
		-										
		-										
	1581.80	-4										
		-										
		-										
		-										
	1580.80	-5										
	1000.00	Ļ										
		-										
		-										
		-										
	1579.80	-6										
		-										
		Ĺ										
		L										
	1578.80	- 7										
		F										
		-										
<u>,</u>		F										
5/11/	4577.00											
ΤĊ	1577.80	⊢ ଷ										
01.G		L										
Ō ≥		F										
Z Z		F										
D.G	1576.80	-9										
9015		-										
007		F										
DOT												
Ž												

						- 9/:	27/98			EXPLORATION LOG			
				ST		= 	27/98						SHEET 1 OF 1
				EN	ND DATE		1-580	Freeway F	vtonci	n Project	STATION	44+07 "P"	
				JC	DB DESCRI	PTION	2500-1 25000 (vada		OFFSET	MG	
	- Arr			LC	DCATION		4.00	Journy, Nev	aua		ENGINEER	Acker	
	S. A.			BC	ORING	04	4+00	_				Peterson	
	Ţ			E.,	A. #		05.00 ()		DATE DEPTH m ELEVEL	DRILLING		
	1º			GI	ROUND EL	EV15	95.99 (m)		9/27/98 NE	METHOD	HQ Core	0/07/4000
				HA	AMMER DR	OP SYS	STEM _	cope - Cathe	ead		BACKFILLED	Yes DA	re <u>9/27/1998</u>
	ELEV.	DEPTH	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	1594.99	0.00 	A					w, PI, Sv		Moist, very dense, br Sand with estimated plastic fines, 50-60% 0-20% gravel. Hard v 30% of soil mass. Su meters in diameter.	own Clayey Gra 30-40% low to to fine to coarse so olcanic cobbles rface boulders	avelly medium sand, comprise to 1.5	
	1593.99 -	- 1.68 - 2 - -	В						-				
	1592.99 -	- 3 3.20	с						SC				
	1591.99 -	- 4.48	D						_				
	1590.99 -		E						_				
	1589.99 -	- - - -	F							6.10			
-	1588.99 -	- - - -											
NV_DOT.GDT 5/11/0	1587.99 -	- - 8 -											
NV_DOT 0079015D.GPJ	1586.99 -	- - - - -											

						Q/ [,]	26/98			EXPLORATION LOG			
				S	TART DATE	<u> </u>	26/08						SHEET 1 OF 1
				EI	ND DATE	9/.	20/90	Eroowov E	vtopoi	n Draigat	STATION _	44+53 "P"	
				JC	OB DESCR	IPTION			xiensi		OFFSET	15.04 KT	
	- Ann			LC	OCATION			Journey, Nev	aua		ENGINEER _	Acker	
	SWW N			B	ORING	04	4+50					Peterson	
	4 m			E.	A. #		00 77 ())			DRILLING	110.0	
	2e			G	ROUND EL	EV15	80.77 (m)		9/26/98 NE	METHOD _	HQ Core	
				H	AMMER DF	ROP SYS		cope - Cathe	ead		BACKFILLED	Yes DA	TE9/26/1998_
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL	DESCRIPTION		REMARKS
		0.00	A					w, PI, Sv		Moist, very dense Sand with estimat	, tan brown Clayey (ed 30-40% medium	to high	
		-							sc	plastic fines, 50-6	0% fine to coarse sa	and, 10%	
		-								comprise 20-30%	of soil mass. Surfac	e l	
	1579 77	1								0.91 boulders to 1 met	er. tan-brown Silty Gr a	avelly	
	10/0.//	-								Sand with estimat	ed 25% slightly plas	tic fines,	
		1.52								45% fine to coars and boulders com	e sand, 30% gravel. prise 20-30% of soil	Cobbles mass.	
		-	В					w, PI, Sv					
	4570 77								GM				
	1376.77	_ 2							Sivi				
		-											
		-											
	4	- 3.05								3.05			
	15//.//		C		50/127	50/127				0.00			
		-											
		-											
		-											
	1576.77	4											
		_											
		-											
		-											
	1575.77	-5											
		_											
		-											
		-											
	1574.77	-6											
		F											
		-											
	1573.77	+7											
Ę		ŀ											
/11/0		F											
DT 5/	1572.77	-8											
DT.GL		t											
V_D0		Ē											
۲ ۲		F											
5D.GF	1571.77	-9											
79015		F											
T 00		Ę											
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						. a/	27/98			EXPLO	ORATIO	N LOG			
				S		<u></u>	27/98								SHEET 1 OF 1
				EI			1.50		vtenci	n Projec	` †		STATION	45+34 "P"	
				JC	DB DESCRI	PTION	ashoo (vada		<i>/</i> L		OFFSET	44.90 L1 MG	
	200			LC	OCATION		15,25	Sounty, Nev	aua				ENGINEER	Acker	
	1 Mar			B	ORING	04	-20 04 J	_		0001				Peterson	
	and			E.	A. #		079-01-	D			NDWATER	ELEVEL	DRILLING		
	20			G	ROUND EL	EV16	01.99 (<u>m)</u>		9/27/98	NE		METHOD	HQ Core	
			N	H	AMMER DR	OP SYS	STEM	kope - Cathe	ead				BACKFILLED	_YesDA	TE9/27/1998
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		ΜΔΤΙ		SCRIPTION		REMARKS
	(m)	(m)	NO.		Increments	300 mm	Recov'd	w PL Sv	Group	_	Moist von				
		- 0.00									Sand with	estimated	30% medium to	high	
		-							SC		plastic fine	es, 60% fine pre clav fine	e to coarse sand s exist in zones	d, 10%	
		0.76	В						-	0.85	decompos	sing volcani	c sediments. Su	urface	
	1600.99 -	-1									boulders t Single har	o 1.5 meter d, fractured	's in diameter. Volcanic bould	ler.	
		-									0				
		-													
		Ľ													
	1599.99 -	_2													
		- 2.29								2.29					
		-						W, P1, SV			Moist, ver	y dense, br	own Silty and C	layey	
		-									cobbles co	omprising 1	0-20% of soil m	lass.	
	1509.00								SC						
	1596.99 -	_3							SM						
		-													
		-								2.01					
		3.81	D							3.81	Hard, frac	tured Volca	inic boulders se	t in a silty	
	1597.99 -	-4									to clayey s	sand matrix	. Core containe	d 3	
		-									Douiders	with very litt	ie mainx.		
		-													
		-													
	1596.99 -	-5													
		5.33	E						-						
		-													
		_													
	1595.99 -	6 6.10	F							6.10					
		Ľ													
		Ļ													
		F													
	1594.99 -	-7													
		F													
		Ľ													
11/01		Ļ													
T 5/1	1593.99 -	-8													
T GD		-													
DO		F													
N		F													
О.GP,	1592.99 -	-9													
3015E		F													
3700		-													
DOT		E													
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ſ						Q/	10/00			EXPL	ORATIO	N LOG			
				S		/د رو	10/00							AF 40 "P"	SHEET 1 OF 1
				E	ND DATE	0/	19/99	 Eroowov E	vtopoi	n Broio	ot		STATION	<u>45+42 "P"</u>	
				JC	DB DESCRI	PTION	1-000		xtensio	on Proje			OFFSET	50.95 KI	
	an			LC	DCATION				ada				ENGINEER	Komatsu F	
	2 May			BC	ORING		+5+42 (I	JB-03) -		000				Dan	0220
	4			E.	A. #		J79-01-:))					DRILLING	T as al de s a	
	Ve			GI	ROUND EL	EV15	5/9.13 (<u>m)</u>		8/19/99	NE		METHOD		
				HA	AMMER DR	OP SYS	STEM	NA					BACKFILLED	Yes DA	TE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT			2014/0	REMARKS
		-									Clayey Sa	and, with 32	2% medium plas	sticity	
		- 0.46	24						SC		fines, 61% subround	6 fine to coa ed gravel.	arse sand, and Contains few m	7% fine	
		0.76	ЗА	GRAE				PI, 5V		0.82	weathered	d andesite	cobbles. Topso	il. Zone	
	1578.13	-1 1 10	3B	GRAB	8			PI, Sv	GW	1 10	lean clay	pockets.			
		1.19								1.19	Dry to mo Well-Grac	bist, dense, ded Gravel	light brown to ta with Sand. with	an 3% low	
		Ľ									plasticity f	fines, 19% 1	fine to coarse sa	and, and	
		-									weathered	d andesite d	cobbles and bou	ulders to	
	1577.13 ·	-2									355 mm c	diameter wit xcavation w	th slight FeOx s with practical refu	taining.	
		-									1.19m.				
		-													
	1576.13	-3													
		-													
		-													
	1575.13	-4													
		-													
		- -													
	15/4.13	-5													
		-													
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	4570 40														
	15/3.13	– °													
		-													
		-													
	1572 13	-													
	1072.10	-													
		-													
/01		-													
5/11	1571.13	-8													
.GDT	101 1110	ŀ													
DOT		-													
Š		t													
CGP.	1570.13	9													
3015E		+													
3200		F													
DOT		Ĺ													
Ž															

							24/98			EXPL	ORATIO	N LOG			
				S		=	25/98							40. E4 "D"	SHEET 1 OF 2
				El	ND DATE		1-200		vtenci	n Proio	~ t		STATION	46+51 "P"	
				JC	DB DESCRI	PTION	1-500			nrioje	JL		OFFSET	8.17 KI	
				LC	OCATION		ashue (Jounty, Nev	aua				ENGINEER	Acker	
	2Wml	2		B	ORING	04	6+50							Peterson	
	Ţ			E.	.A. #	0	079-01-	о ,		GROU					
	Ž.			G	ROUND EL	EV15	691.80 (<u>m)</u>		9/25/98	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead_				BACKFILLED	Yes DA	TE <u>9/25/1998</u>
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT	Percent		USCS		МАТ				PEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group					ant in a	REMARKS
		- 0.00						W, FI, SV			silty grave	elly sand ma	atrix. Cobbles co	omprise up	
		-									to 70% of	soil mass.			
		0.76	в					w, PI, Sv,	4						
	1590.80	-1						Sn							
		-													
		-													
		-													
	1589.80	1.98	C C												
	1505.00	_	Ŭ												
		_ 2.44	D						_						
		-													
	4500.00	-								3.05					
	1588.80	_3								3.05	Moist, der	nse, brown	Silty Gravelly S	and with	
		_									estimated	l 15% slight arse sand	ly plastic fines, 10-20% gravel	65-75% Hard	
		- 3.66	E						_		cobbles c	omprise 10	-20% of soil ma	SS.	
		3.96	5 -												
	1587.80	-4	1												
		-													
		-													
	1586.80	-5 5.18													
		_	9												
		_													
		5.94													
	1585.80	6	Н						1						
		6.40													
		- 6.68													
		-	J						1						
	1584.80	-7							~~~		Volcanic	cobbles cor	nprise 60-70% (of soil	
		-							SM		mass.				
		7.62	K												
11/01		_													
T 5/1	1583.80	-8													
T.GD		-													
DO															
NN r		- 8.65	' L						-						
D.GP.	1582.80	-9													
9015[-													
3200		F													
DOT		Ľ													
NN		-													

						/۵	24/08			EXPLORATI	ON LOG			
				ST	FART DATE	<u> </u>	24/30							SHEET 2 OF 2
				El	ND DATE	9/.	20/90	 				STATION	46+51 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Project		OFFSET	8.17 RT	
	.sm			LC	OCATION		ashoe (County, Nev	ada			ENGINEER	SDB/MG	
	1Mm	C A		BC	ORING	04	6+50		r			EQUIPMENT	Peterson	
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROUNDWAT			1 01013011	
	ž			GI	ROUND EL	_{EV.} _15	91.80 (m)		9/25/98 NE	m ELEV. m	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead			BACKFILLED	_YesDA	ATE 9/25/1998
	FI FV	DEPTH	SAI	MPLE	BLOW CO		Doroont		USCS	N/ A		ESCRIPTION		DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD TESTS	Group			ESCRIPTION		REWARKS
		10.21	м						-					
		-												
		-								Large fr	actured volc	anic boulders		
	1580 80	11								Eargon				
	1000100	- 11.28	N							11.28				
		_	IN											
		-												
	1570.90	12												
	1379.00	_ 12												
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r 5/1	1573.80	-18												
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J.GP.	1572.80	-19												
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3200		-												
DOT		F												
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EXPLORATION LOG		
START DATE 9/27/98		SHEET 1 OF 1
END DATESTATIONSTATION	46+59 "P"	
JOB DESCRIPTION OFFSET OFFSET	 MG	
LOCATION ENGINEER ENGINEER	Acker	
BORING 040700 EQUIPMENT	Peterson	
E.A. #		
GROUND ELEV. 1010.03 (III) 9/27/98 NE METHOD	Voo	0/27/1009
HAMMER DROP SYSTEM BACKFILLED BACKFILLED	DATI	E9/27/1996
ELEV. DEPTH SAMPLE BLOW COUNT LAB TESTS USCS Group MATERIAL DESCRIPTION		REMARKS
(m) (m) HC HT L Increments 300 mm Recovid Cloup High plastic Sandy Clay with surface h	ooulders	
CH 0.30 to 1.5 meters in diameter.		
Hard volcanic cobbles and boulders w	lith clayey	
1609.05 -1		
- 1.52 B W. PI. Sv		
1608.05 -2		
3.51		
- Moist, dense, brown grey Silty Sand v	vith	
3.96 Sand. Interbedded gravelly lenses. Ha	s% fine	
1606.05 + 4 volcanic cobbles comprise up to 50%	of soil	
- 4.88 E		
1605.05 + 5		
1604.05 + 6		

						. 2/	28/00			EXPLORATION LOG			
				ST	ART DATE	<u> </u>	28/00					47.47 """	SHEET 1 OF 1
				EN	ND DATE		20/00 1_EQA		vtenci	n Project	STATION	47+47 "P"	
				JC	B DESCRI	PTION			vada		OFFSET	DC	
	- An-			LC	OCATION		17 17	Sounty, Nev	aua		ENGINEER	JD 792	
	× 14			BC	ORING		70 01	5				Tim	
	1 m			E./	A. #		06 56 /	(m)		DATE DEPTH m ELEVEL	DRILLING	Trackhaa	
	le			GF	ROUND EL	EV15	90.30 (<u>(m)</u>		3/28/00 NE	METHOD		
				HA	MMER DR	OP SYS	STEM	NA			BACKFILLED	Yes DA	TE
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	_	REMARKS
		-							SC	Very moist, medium of Clayey Sand with Gra 29% low plastic fines, 26% fine to coarse gr	lense to dense, avel with approx , 45% fine to co avel.	brown, kimately arse sand,	
	1595.56	-1 1.22	A	GRAB				MC, SA, PI	_	1.22			
		- 1.83							GM	Moist, dense to very of Gravel with Sand with plastic fines, 38% fine	dense, brown, S n approximately to coarse sand	5ilty 14% low d, 48% fine	
	1594.56	-2 2 13	В	GRAB				MC, SA, PI	Givi	to coarse graver with	<5% Small Codi	Jies.	
		-							-	2.29	0.14 0		
	1593.56	- - 							SM	Moist, very dense, bro Gravel with approxim fines, 49% fine to coa coarse gravel with ap cobbles.	own, Silty Sand ately 16% non- Irse sand, 35% proximately 159	olastic fine to % small	
		- 3.66	;										
		- 2.06	С	GRAB				MC, SA, PI	1	2.06			
	1592.56									3.90			
		-											
		_											
		-											
	1591.56	-5											
		-											
		-											
		_											
	1590.56	-6											
		-											
		-											
		-											
	1589 56	-7											
	1000.00	-											
		_											
10		-											
5/11/	4500 50	-											
DT	1588.56	-8											
OT.0		-											
		-											
4 Ld		-											
5D.G	1587.56	-9											
1061													
DT 00		-											
/_DC		-											
ź													

								0	21/08			EXPL	ORATIO	N LOG			
					S	TART D	ATE	<u> </u>	24/90								SHEET 1 OF 1
					E	ND DAT	E		24/90		vtonoi	on Droio	ot		STATION	47+47 "P"	
	/				J	OB DES	CRI	PTION	1-000		xtensi	JITFIOJE	J		OFFSET		
24					L	OCATIC	N			Journy, Nev	vaua				ENGINEER	Acker	
3 ANN					B	ORING			+7+50	_						Peterson	
1 h					E	.A. #			J79-01-0) 				FLEVEL	DRILLING		
2					G	ROUNE) ELI	EV	596.65 (m) Nama Oath		9/24/98	NE		METHOD	HQ Core	0/04/4000
		/			Н	AMMEF	RDR	OP SY	STEM _	cope - Cath	ead				BACKFILLED	Yes D	ATE 9/24/1998
ELEV. (m)	C	DEPT (m)	н	SAI NO.	MPLE TYPE	BLO 150 n	W CO nm ents	OUNT Last 300 mn	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
	_	0.	00	А									Surface b	oulders to	1.3 meters.		Placed casing to
1595.65	-	1											Hard volc in diamete Cobbles a mass.	anic cobble er set in a S and boulder	es and boulders Silty Gravelly Sa 's comprise 60-8	to 1 meter nd matrix. 30% of soil	T.o meters.
	_	1.	52	в							-						
1594.65		2															
1593.65	-	<u>3</u> 3.	05	C							_		Decompo	sed granitio	c cobble.		
1592.65	-	3. 4	96														
1591.65	-	<u>4.</u> 5	88	E							_						
1590.65	-	66.	10	-F-							_						
1589.65	-	7	~~~														
1588.65	-	<u>7.</u> 8	62	G													
1587 65	F	9															
	_	-										9.14					
	-																
	ELEV. (m) 1595.65 1593.65 1593.65 1593.65 1593.65 1593.65 1589.65 1589.65	ELEV. [ELEV. [1595.65 - 1594.65 - 1592.65 - 1592.65 - 1599.65 - 1599.65 - 1589.65 - 1588.65 - 1588.65 - 1588.65 - -	ELEV. DEPT (m) $0.$ 1595.65 -1 1593.65 -2 1593.65 -2 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -4 1593.65 -5 1593.65 -6 6 -1 1593.65 -7 1593.65 -7 1593.65 -6 1593.65 -7 1593.65 -7 1589.65 -7 1589.65 -7 1588.65 -8 1587.65 -9	ELEV. (m) DEPTH (m) 1595.65 -1 - - 1595.65 -1 - - 1593.65 -2 - - 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 1593.65 -3 - -3 1593.65 -5 - -3 1593.65 -5 - -3 1593.65 -7 - -3 1593.65 -7 - -3 1589.65 -7 - -7 - -7 - -7 - -7 - -7 - -7 - -7 - -7 - -7 - -7 - <td< td=""><td>ELEV. (m) DEPTH (m) SAI NO. 1595.65 -1 - - 0.00 A - - - 1595.65 -1 - - 1.52 B - - - 1593.65 -2 - - - - 1593.65 -3 3.05 C - - - - 1593.65 -3 3.06 C - - - - 1593.65 -4 D - - - - - 1593.65 -5 - - - - - - 1591.65 -6 6.10 - - - - - 1589.65 -7 - - - - - - - - - - - - - - - - - -</td><td>ELEV. (m) DEPTH (m) SAULE (m) 0.00 A - 0.00 A - - 1595.65 -1 - - 1593.65 -2 - - 1593.65 -2 - - 1593.65 -3 - - - - 1593.65 -4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -</td><td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>START DATE 9/ END DATE 9/ JOB DESCRIPTION LOCATION LOCATION 0/2 ELEV. DEPTH MAMMER DROP SY3 ELEV. DEPTH 0.00 A 1595.65 -1 1.52 B 1595.65 -1 1.52 B 1593.65 -2 1593.65 -2 1593.65 -2 1593.65 -1 1593.65 -2 1593.65 -1 -1.52 B -1.53 C -1.54 D -1.55 C<</td><td>START DATE 9/24/98 9/24/98 JOB DESCRIPTION I-580 I-580 0079-01-3 GROUND ELEV. ELEV. DEPTH SAMPLE BLOW COUNT HAMMER DROP SYSTEM ELEV. DEPTH SAMPLE BLOW COUNT Increments BLOW COUNT 1595.65 -1 - - - 1595.65 -1 - - - 1595.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -2 - - - - 1593.65 -3 3.05 - - - - 1593.65 -5 - - - - - 1599.65 -7</td><td>START DATE 9/24/98 START DATE 9/24/98 JOB DESCRIPTION 1-580 Freeway E JOB DESCRIPTION 1-580 Freeway E COLOTION Washoe County, Nev BORING 047+50 EA.# 0079-01-5 GROUND ELEV 1596.65 (m) HAMMER DROP SYSTEM Rope - Cath ELEV. DEPTH SAMPLE BLOW COUNT HAM TROPE - Cath 1595.65 -1 </td><td>START DATE 9/24/98 END DATE 9/24/98 JOB DESCRIPTION I-580 Freeway Extension LOCATION Washoe County, Nevada BORING 047+50 E.A.# 0079-01-5 GROUND ELEV. 1590.665 (m) HAMMER DROP SYSTEM Rope - Cathead 1595.65 1 0.00 A 1595.65 1 1595.65 1 1595.65 1 1595.65 1 1594.65 2 1593.65 1 1593.65 3 1593.65 3 1593.65 1 1593.65 1 1593.65 1 1593.65 3.305 2 1 1593.65 3.305 3.96 1 1593.65 3.96 4.88 1 1593.65 6 1593.65 1 1593.65 1 1593.65</td><td>START DATE 9/24/98 EXPL END DATE 9/24/98 </td><td>START DATE 9/24/98 EXPLORATIO END DATE 9/24/98 JOB DESCRIPTION L-580 Freeway Extension Project JOB DESCRIPTION L-580 Freeway Extension Project LOCATION Washoe County, Nevada BORING 0/079-01-5 GROUNDELEV JS96.65 (m) Image: Start Date Image: Start Date Image: Start Date ELEV. DEPTH MAMER DROP SYSTEM Rope - Cathead Image: Start Date <td< td=""><td>EXPLORATION LOG START DATE 9/24/98 EXPLORATION LOG END DATE 9/24/98 USE SCRIPTION 1-580 Freeway Extension Project LOCATION WASHOE County, Nevada BORING OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">GROUNDWATER LEVEL OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">OUTPOID 1-580 Freeway Extension Project OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension ISSUE 1 OUTPOID 1-580 Freeway Extension</td><td>START DATE 9/24/98 EXPLORATION LOG UD DATE 9/24/98 STATION USB DESCRIPTION L508 DFseeway Extension Project OFFSET LICCATION Washee County, Nevada EWINNER BORING 0/47-50 EXPLORATION LOG EA # 0/73-01-5 GROUNDWATER LEVEL GROUND ELEV. 1906 055 (m) 9/24/98 HAMMER DROP SYSTEM Rope - Cathead BACKFILLED Mol TYPE BOW COUNT Las TESTS USCS Mol TYPE BOW COUNT Las TESTS USCS IS93.65 1 Indicate and an another station of the sta</td><td>START DATE 9/24/98 START DATE 9/24/98 JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG LOCATION Washoe County, Nevada EGUIMEER Acker BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core 9/24/98 NE SURface Notice Provided Start MATERIAL DESCRIPTION HQ Core BACKFILLE Vss. D 1556.5 -1 -1.52 B SURface Notice Cobles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters 1558.65 -1 -1.52 B -1.52 B B Hard volcanic cobbles Material Description Sufficience Material Description Sufficience 1559.65 -1 -1.52 B Sufficience <t< td=""></t<></td></td<></td></td<>	ELEV. (m) DEPTH (m) SAI NO. 1595.65 -1 - - 0.00 A - - - 1595.65 -1 - - 1.52 B - - - 1593.65 -2 - - - - 1593.65 -3 3.05 C - - - - 1593.65 -3 3.06 C - - - - 1593.65 -4 D - - - - - 1593.65 -5 - - - - - - 1591.65 -6 6.10 - - - - - 1589.65 -7 - - - - - - - - - - - - - - - - - -	ELEV. (m) DEPTH (m) SAULE (m) 0.00 A - 0.00 A - - 1595.65 -1 - - 1593.65 -2 - - 1593.65 -2 - - 1593.65 -3 - - - - 1593.65 -4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	START DATE 9/ END DATE 9/ JOB DESCRIPTION LOCATION LOCATION 0/2 ELEV. DEPTH MAMMER DROP SY3 ELEV. DEPTH 0.00 A 1595.65 -1 1.52 B 1595.65 -1 1.52 B 1593.65 -2 1593.65 -2 1593.65 -2 1593.65 -1 1593.65 -2 1593.65 -1 -1.52 B -1.53 C -1.54 D -1.55 C<	START DATE 9/24/98 9/24/98 JOB DESCRIPTION I-580 I-580 0079-01-3 GROUND ELEV. ELEV. DEPTH SAMPLE BLOW COUNT HAMMER DROP SYSTEM ELEV. DEPTH SAMPLE BLOW COUNT Increments BLOW COUNT 1595.65 -1 - - - 1595.65 -1 - - - 1595.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -1 - - - 1593.65 -2 - - - - 1593.65 -3 3.05 - - - - 1593.65 -5 - - - - - 1599.65 -7	START DATE 9/24/98 START DATE 9/24/98 JOB DESCRIPTION 1-580 Freeway E JOB DESCRIPTION 1-580 Freeway E COLOTION Washoe County, Nev BORING 047+50 EA.# 0079-01-5 GROUND ELEV 1596.65 (m) HAMMER DROP SYSTEM Rope - Cath ELEV. DEPTH SAMPLE BLOW COUNT HAM TROPE - Cath 1595.65 -1	START DATE 9/24/98 END DATE 9/24/98 JOB DESCRIPTION I-580 Freeway Extension LOCATION Washoe County, Nevada BORING 047+50 E.A.# 0079-01-5 GROUND ELEV. 1590.665 (m) HAMMER DROP SYSTEM Rope - Cathead 1595.65 1 0.00 A 1595.65 1 1595.65 1 1595.65 1 1595.65 1 1594.65 2 1593.65 1 1593.65 3 1593.65 3 1593.65 1 1593.65 1 1593.65 1 1593.65 3.305 2 1 1593.65 3.305 3.96 1 1593.65 3.96 4.88 1 1593.65 6 1593.65 1 1593.65 1 1593.65	START DATE 9/24/98 EXPL END DATE 9/24/98	START DATE 9/24/98 EXPLORATIO END DATE 9/24/98 JOB DESCRIPTION L-580 Freeway Extension Project JOB DESCRIPTION L-580 Freeway Extension Project LOCATION Washoe County, Nevada BORING 0/079-01-5 GROUNDELEV JS96.65 (m) Image: Start Date Image: Start Date Image: Start Date ELEV. DEPTH MAMER DROP SYSTEM Rope - Cathead Image: Start Date Image: Start Date <td< td=""><td>EXPLORATION LOG START DATE 9/24/98 EXPLORATION LOG END DATE 9/24/98 USE SCRIPTION 1-580 Freeway Extension Project LOCATION WASHOE County, Nevada BORING OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">GROUNDWATER LEVEL OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">OUTPOID 1-580 Freeway Extension Project OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension ISSUE 1 OUTPOID 1-580 Freeway Extension</td><td>START DATE 9/24/98 EXPLORATION LOG UD DATE 9/24/98 STATION USB DESCRIPTION L508 DFseeway Extension Project OFFSET LICCATION Washee County, Nevada EWINNER BORING 0/47-50 EXPLORATION LOG EA # 0/73-01-5 GROUNDWATER LEVEL GROUND ELEV. 1906 055 (m) 9/24/98 HAMMER DROP SYSTEM Rope - Cathead BACKFILLED Mol TYPE BOW COUNT Las TESTS USCS Mol TYPE BOW COUNT Las TESTS USCS IS93.65 1 Indicate and an another station of the sta</td><td>START DATE 9/24/98 START DATE 9/24/98 JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG LOCATION Washoe County, Nevada EGUIMEER Acker BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core 9/24/98 NE SURface Notice Provided Start MATERIAL DESCRIPTION HQ Core BACKFILLE Vss. D 1556.5 -1 -1.52 B SURface Notice Cobles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters 1558.65 -1 -1.52 B -1.52 B B Hard volcanic cobbles Material Description Sufficience Material Description Sufficience 1559.65 -1 -1.52 B Sufficience <t< td=""></t<></td></td<>	EXPLORATION LOG START DATE 9/24/98 EXPLORATION LOG END DATE 9/24/98 USE SCRIPTION 1-580 Freeway Extension Project LOCATION WASHOE County, Nevada BORING OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">GROUNDWATER LEVEL OUTPOID 1-580 Freeway Extension Project COUND LEV. 1596.65 (m) Colspan="2">OUTPOID 1-580 Freeway Extension Project OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension OUTPOID 1-580 Freeway Extension ISSUE 1 OUTPOID 1-580 Freeway Extension	START DATE 9/24/98 EXPLORATION LOG UD DATE 9/24/98 STATION USB DESCRIPTION L508 DFseeway Extension Project OFFSET LICCATION Washee County, Nevada EWINNER BORING 0/47-50 EXPLORATION LOG EA # 0/73-01-5 GROUNDWATER LEVEL GROUND ELEV. 1906 055 (m) 9/24/98 HAMMER DROP SYSTEM Rope - Cathead BACKFILLED Mol TYPE BOW COUNT Las TESTS USCS Mol TYPE BOW COUNT Las TESTS USCS IS93.65 1 Indicate and an another station of the sta	START DATE 9/24/98 START DATE 9/24/98 JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG JOB DESCRIPTION -580 Freeway Extension Project OFFRET MG LOCATION Washoe County, Nevada EGUIMEER Acker BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core BOOKING 047-50 EA 0079-01-5 CRUNDWATER LEVEL DEELEV. DEFINIT MELEVINI Peterson HQ Core 9/24/98 NE SURface Notice Provided Start MATERIAL DESCRIPTION HQ Core BACKFILLE Vss. D 1556.5 -1 -1.52 B SURface Notice Cobles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters Hard volcanic cobbles and boulders to 1 meters 1558.65 -1 -1.52 B -1.52 B B Hard volcanic cobbles Material Description Sufficience Material Description Sufficience 1559.65 -1 -1.52 B Sufficience <t< td=""></t<>

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					ST	TART DATE	= <u>0/</u> 0/	10/00								SHEET 1 OF 1
					E١	ND DATE	0/	19/99		vtonoi	on Droigot			STATION	47+64 "P"	
					JC	B DESCR		1-000		xtensi	ULLEI			OFFSET	<u>39.72 LI</u>	
	204				LC	OCATION				ada				ENGINEER	Komatsu Fi	<u></u>
	2Mm	6)		BC	ORING	04	17+64 (WQB-2) -]		Dan	0220
	A.		1		Ε.	A. #		079-01-)			WAIER	LEVEL			
	2u	7			GI	ROUND EL	EV16	504.98 (m)		8/19/99	NE		METHOD		
					HA	AMMER DF	ROP SYS		IA					BACKFILLED	_YesDA	TE <u>8/19/1999</u>
	ELEV. (m)	DEP (m	PTH 1)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
		_									Mo	oist, me	dium dense	, dark brown Cl	ayey	
		- (0.46							60	fine	e to coa	arse sand, a	and 8% fine to c	oarse	
		-	0.76	4A	GRAB				PI, Sv	30	sul	brounde	ed gravel.			
		-								1	0.98					
	1603.98 -	<u> </u>	1.22								Mo	oist, den	ise, brown t	o grey Well-Gra	aded	
			1 50	4B	GRAB				PI, Sv	1	pla	avel with asticity fi	ines, 40% f	ine to coarse sa	and, and	
		-	1.52							-	52	% fine t	o coarse gr	avel. Contains	highly	
		-								0.44	dia	ameter a	and few sub	rounded to sub	angular	
	1602.98 -	-2								GW	mo	oderatel	y weathere	d 'corestone' an	desite	
		-										00100.				
		-														
	1601.98 -	-3									3.05					
		-									IVIC	oderate	almiculty ex	cavating.		
		-														
	1600.98 -	-4														
		-														
		-														
		-														
	1599 98 -	5														
		-														
		-														
		-														
	4500.00															
	1598.98 -	6														
		Ļ														
		-														
		F														
	1597.98 -	† 7														
		[
		Ļ														
11/0		F														
JT 5/	1596.98 -	-8														
T.GL		F														
		[
х Г		Ļ														
D.GP	1595.98 -	-9														
9015.		F														
007		F														
DOT		[
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					ST	TART DATE	<u> </u>	24/30						SHEET 1 OF 1
					E١	ND DATE	9/2	24/90		vtor-	n Broiget	STATION	48+99 "P"	
					JC	DB DESCRI	PTION	1-580	reeway E	xtensi	DI Project	OFFSET	1.52 RT	
					LC	OCATION	W	ashoe (County, Nev	ada		ENGINEER	MG Aakar	
	Ma	6	5		BC	ORING	04	9+00				EQUIPMENT	Acker	
	MA				E.	A. #	00	79-01-8	5		GROUNDWATER LEVEL	OPERATOR	Feleison	
	ž	~			GI	ROUND EL	_{EV.} _16	12.24 (m)		DATE DEPTH m ELEV. m	METHOD	HQ Core	
					HA	AMMER DR	OP SYS		Rope - Cathe	ead	9/24/90 INL	BACKFILLED	Yes DAT	E 9/24/1998
				SAI	MPLE	BLOW C	OUNT							
	ELEV. (m)	DE	PTH m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
			0.00								Moist, dense, brown	Silty to Clayey	Gravelly	
		_									fines, 60% fine to coa	15% slight to lo arse sand. 25%	w plastic gravel.	
		_		А					w, PI, Sv		Few cobbles. Surface	e boulders to 1 r	neter.	
		-												
	1611.24 -	-1	4 00											
		-	1.22							1				
		-												
				Б										
	1610.24 -	-2		в					W, PI, SV					
		_									Abundant decompose	ed aranitic cobb	les and	
			2.44							-	small boulders.	g		
		-		С						sc				
		-	2.90							SM				
	1609.24 -	-3												
				P										
		-		U										
		-	2.06								Small hard volcanic b	oulder.		
	1608.24 -	-4	3.90	E		31	50/102			-				
		-	4.27	E		50/102	50/102			-				
		-												
											Abundant small hard	volcanic cobble	s up to	
	1607.24 -	-5									50% OF SOIL MASS. Fe	w decomposed	granucs.	
		-												
		-	5.49	F							5.49			
		-		•										
		-												
	1606.24 -	6												
		F												
		+												
	1605.24 -	+7												
		F												
		F												
1/01		Ľ												
5/11	1604 24 -	8												
GDT		Ļ												
OT.		F												
		+												
1 Ld		F												
5D.G	1603.24 -	-9												
7901:		F												
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БQ														
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						0/	23/02			EXPLORATION LOG		
				ST	FART DATE	<u> </u>	20/80 22/00					SHEET 1 OF 1
				E١	ND DATE	9/.	23/90		vtona	STATIC	DN <u>50+44 "P"</u>	
				JC	DB DESCRI	PTION	1-580		xtensi	OFFSE	T <u>2.08 L1</u>	
	an.			LC	OCATION		asnoe (Jounty, Ne	ada	ENGIN	EER NG	
	2WM	2		BC	ORING	05	0+50			EQUIP	MENT <u>Acker</u>	
	Ţ			Ε.	A. #		079-01-5	5		GROUNDWATER LEVEL OPERA	NG US S	
	Ž.			GI	ROUND EL	EV16	514.71 ((m)	<u> </u>	9/23/98 NE METHO	DD HQ Core	
				HA	AMMER DR	OP SYS	БТЕМ _	Rope - Cath	ead	BACKF	ILLED Yes D	ATE 9/23/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIF	TION	REMARKS
		0.00	A					w, PI, Sv		Moist, dense, brown Silty Gra	velly Sand with	
		-								granitics. Variable gradation v	vith few clayey	
		-								zones.		
	1612 71	-										
	1013.71											
		1.52										
		-	В					w, PI, Sv	1			
		-										
	1612.71	-2										
										Decomposed granitic boulder	0.7 meters in	
		-								diameter.		
		-										
	1611.71	3 3.05	С						SM			
		- 3.66										
		_]	Few hard volcanic cobbles - r	nainly	
	1610.71	-4								boulders.		
		-										
		4.57	E						-			
		-										
	1609.71	-5										
		-										
		- 5.49	F						-	Small volcanic cobbles comp	rise 60-70% of soil	
		_								mass.		
	1608.71	6 6.10	G							6.10		
		-	0									
		Ĺ										
		L										
	1607.71	- 7										
		F										
		F										
1/01		Ľ										
- 5/1	1606.71	-8										
.GDT		F										
DOT		F										
N		F										
.GPJ	1605 71	Ĺ										
015D.	1000.71											
0079(F										
DT		F										
NV_DOT 0079015D.GP	1605.71	9 - - -										

						. o/	23/98			EXPLORATION LO	G			
				S1		<u> </u>	23/98							SHEET 1 OF 1
				El	ND DATE		L-20190		vtenci	n Project		STATION	52+06 "P"	
				JC	DB DESCRI	PTION	1-000					OFFSET	<u>16.93 RT</u>	
	200			LC	DCATION		asilue (Journy, Nev	aud			ENGINEER	Acker	
	S.M.M.			BC	ORING	0	2+10						Peterson	
	1 h			E.	A. #		079-01-:) 			EL V m	DRILLING		
	V			GI	ROUND EL	EV16	20.55 (m) Dama Oath		9/23/98 NE	v	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM	kope - Cathe	ead			BACKFILLED	Yes DA	TE9/23/1998
ĺ	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIA	AL DE	SCRIPTION		REMARKS
		0.00	A					W, PI, SV		Moist, dense, bi estimated 30-40	orown C 0% me	dium plastic fir	th nes,	
		-								60-70% fine to a	coarse	sand. Minor g	ravel.	
									SC	cobbles.		u decomposed	granitic	
	1619.55	-1												
		-								1.22 Moist donso bi	rown S	ilty Gravelly S	and with	
		- 1.52	в							estimated 10-20	0% slig	htly plastic fine	es, 60-80%	
										fine to coarse sa hard volcanic ar	and, 10 and dec	0-20% gravel. / omposed gran	Abundant	
	1618.55 ·	-2								and boulders.		empered gran		
		-												
		-												
		-												
	1617.55		6					w, PI, Sv,						
		-						Sh		Cobbles and bo	oulders	comprise 40%	o of soil	
		-								mass below 5 m	meters.			
		-							SM					
	1616.55	-4												
	1010.00	-												
		4.57												
		-	D						-					
	1615 55	-5												
	1010.00	Ļ												
		-												
		-												
	1614.55	6 6 10								6 10				
	.017.00	- 0.10	E					w, PI, Sv		0.10				
		F												
		F												
	1613.55	_ 7												
		F.												
		F												
<u>(</u>		F												
5/11,	1612 55	_ 8												
GDT	1012.00													
DOT.		F												
N		F												
GPJ	1611 FF	L.												
015D.	. 56.1101	-9												
)620C		F												
Ď		F												

SIAH DATE USUAL SHET + OF FEND DATE 292398 STATION 53+53 *P JOB DESCRIPTION L580 Freeway Extension Project OFFSET MG LOCATION Washoe County, Nevada ENVINEER Acker BORING 063+50 EA.# 0079-01-5 ENVINEER Acker GROUND ELEV_1532.20 (m) BATE DEPTH m ELEV. DEPTH m ELEV. </th <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th> <th>Q/'</th> <th>23/98</th> <th></th> <th></th> <th>EXPLO</th> <th>ORATIO</th> <th>N LOG</th> <th></th> <th></th> <th></th>					-		Q/'	23/98			EXPLO	ORATIO	N LOG			
END DATE U-SUB Creeway Extension Project STATION Station JOB DESCRIPTION Washoe County, Nevada OFFSET MG BORING 053+50 Country MG BORING 053+50 Country Peterson BORING 0079-01-5 Country Peterson GROUND ELEV. 1632.20 (m) MG MG MAMEE BORING Robord Link Peterson MO TYPE BORING MG MG MO MO MO Peterson MG MO MO MO MG MG MO MO MO MG MG MO MO MG MG MG MI MO MG MG MG MO MG MG MG MG MO MG MG MG MG MI MG MG MG MG MI MG MG MG <td></td> <td></td> <td></td> <td></td> <td>S</td> <td></td> <td>= \</td> <td>23/98</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>SHEET 1 OF 1</td>					S		= \	23/98								SHEET 1 OF 1
JOB DESCRIPTION LOUATION Washoe County, Nevada Correst 3.98 L1 BORING 053+50 Extension Frage MG Acker Acker GROUND ELEV. 1632.20 (m) MATE DEPTH m ELEV. DERLING MG HO Core 10000 A MO MG As rests USCS MATERIAL DESCRIPTION PEARKS 1031.00 1 MO MVPL SM Moldt. dense, brown Sity Gravelly Sand. Surface boulders to 1.3 meters. Sitil Gravelly Sand. 1631.00 1 Moldt.dense, brown Sity Gravelly Sand. Small boulders at 1.5 and 2 meters. Small boulders. Small boulders. Small boulders. 1632.00 2 Small boulders. Small boulders. Clay lense 0.3 meters thick. Small boulders. 1632.00 4 Small					El	ND DATE	9/.	20/30		vtonoi	n Proioc	` +		STATION	53+53 "P"	
LOCATION <u>Washed County, Nevada</u> BORING <u>053+50</u> E.A.# <u>0079-01-5</u> GROUND ELEV. <u>1632.20 (m)</u> HAMMER DROP SYSTEM Rope - Cathead ELEV. <u>DEPTH MAMER DROP SYSTEM Rope - Cathead</u> <u>1630.20 A</u> <u>1000 Å HERMER BOWCOUNT, Nevada</u> <u>1631.20 1</u> <u>1 28 B</u> <u>1631.20 1</u> <u>1 28 B</u> <u>1632.20 C</u> <u>2.80 C</u> <u>2.80 C</u> <u>1622.00 C</u>					JC	DB DESCRI	PTION	1-060		xtensic	n Projec	1		OFFSET	9.58 LT	
BORING 0.53+30 (0079-01-5) (RCUIND ELEV, 1632,20 (m) HAMMER DROP SYSTEM GOUD To LEV, 1632,20 (m) (m) Constrained for the level of the level	.Jac				LC	OCATION		asnoe (Jounty, Nev	aua				ENGINEER		
E.A.#	2MM	c	5		B	ORING	05	3+50]	EQUIPMENT	Peterson	
OROUND ELEV 1632.20 (m) During Lev Michael DROP SYSTEM Rope - Cathead U23398 He High Core 102398 He High Core 103120 High Core Yes 11 High Core High Core 11 <td< td=""><td>Ĩ,</td><td></td><td>61</td><td></td><td>E.</td><td>A. #</td><td>00</td><td>)79-01-{</td><td>5</td><td></td><td>GROU</td><td>NDWATER</td><td></td><td></td><td></td><td></td></td<>	Ĩ,		61		E.	A. #	00)79-01-{	5		GROU	NDWATER				
HAMMER DROP SYSTEM_ROPE - Cathead Date Yes DATE 9/23/199 ELEV. DEPTH (m) SMMPLE NO. TYPE 150 mm LaB TESTS UCCS Group MATERIAL DESCRIPTION REMARKS 1631.20 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1					G	ROUND EL	EV16	32.20 (m)		DATE 9/23/98	DEPTH m NF	ELEV. m	METHOD	HQ Core	
ELEV. (m) DEPTH (m) SAMPLE NO. TYPE BOW COUNT Increments LAB TESTS USCS Group MATERIAL DESCRIPTION REMARKS 1631.00 -1 -100 mm Record w, PI, Sv Moist, dense, brown Silty Gravelly Sand. Surface boulders to 1.3 meters. SM 1631.20 -1 -1.28 -1 -1.28 w, PI, Sv I.68 1630.20 -2 -2 -1.28 w, PI, Sv SM 1630.20 -2 -2 -2.80 -2.80 -2.80 1629.20 -3 -4.27 -4.27 -2.80 -4.27 1628.20 -4 -4.27 -4.27 -4.27 -4.27 1628.20 -6 6.10 -5 -5.10 -5.10			\mathbf{v}		H	AMMER DR	OP SYS	STEM	Rope - Cathe	ead	0,20,00			BACKFILLED	_Yes DA	TE9/23/1998
Last Defecting Last Percent Increments Last Percent Record Last TESTS Stops Moist dense, brown Silty Gravelly Sand. 1631.20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		DE	отц	SAI	MPLE	BLOW C	OUNT	-		11909						
1631.20 1 128 w, Pl, Sv Moist, dense, brown Sity Gravelly Sand. Surface boulders to 1.3 meters. 1631.20 1 1.28 w, Pl, Sv 1.68 1630.20 2 0 1.68 1630.20 2 0 1.68 1630.20 2 0 1.68 1630.20 2 0 1.68 1630.20 2 0 1.68 1630.20 2 0 0 1630.20 2 0 0 1629.20 3 0 0 1629.20 3 0 0 1629.20 4 0 0 1629.20 4 0 0 1629.20 5 0 0 1629.20 4 0 0 1629.20 4 0 0 1629.20 5 0 0 1628.20 4 0 0 1628.20 6 6.10 0.3	(m)	(1	m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LABTESTS	Group		MAII	ERIAL DE	SCRIPTION		REMARKS
1631.20 1 1.28 M 1630.20 -2		_	0.00	A					w, PI, Sv			Moist, der Surface b	nse, brown oulders to 2	Silty Gravelly S	and.	
1631.20 -1		-										Currace D				
1631.20 -1		-														
1631.20 -1 1631.20 -1 1631.20 -1 1630.20 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2.80 -2 -2.80 -2 -3 -2.80 -4 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -4.27 -5 -4.27 -5 -4.27 -5 -4.27 -5	1001.00	-								SM						
1630.20 -2 1.68 1630.20 -2 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1630.20 -2 1629.20 -3 -3 -2.80 -4 -2.80 -4 -4.88 -4 -4.88 -4 -4.88 -5 -4.88 -6 -6.10 -6 -6.10	1631.20	1	1 28													
1630.20 -2 -2 Moist, dense, brown Clayey Sand with estimated 20-40% medium plastic fines, 60-80% very fine to coarse sand. Minor gravel. Small boulders at 1.5 and 2 meters. 1629.20 -3 -2.80 2.80 1629.20 -3 -4 -2.80 1628.20 -4 -4.27 -4.27 1628.20 -4.27 -4.27 -4.27 1628.20 -6.10 -6.10		_	1.20	В					w, PI, Sv	1						
1630.20 -2 A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A <		_									1.68					
1630.20 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2		-										Moist, der	nse, brown	Clayey Sand wi	th	
1629.20 -3 -3 -3 Moist, dense, brown Silty Gravelly Sand with estimated 20% slightly plastic fines, 60-70% fine to coarse sand, 10-20% gravel. Abundant hard volcanic and decomposed granitic cobbles and boulders. 1628.20 -4 -4.27 -4.27 1628.20 -4 -4.27 -4.28 1628.20 -6 6.10 -6.10	1630.20	-2										60-80% v	ery fine to c	oarse sand. Mi	nor gravel.	
1629.20 -3 1629.20 -3 -4 -4 -4.27 -4 -4.27 -4 -4.27 -5 -5 -5 -5 -6 -5 -6 -5 -6 -10 -6 -10 -6 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10		-								SC		Small bou	Iders at 1.5	and 2 meters.		
1629.20 3 2.80 1629.20 3 A 1629.20 4 1628.20 4 4 4 1628.20 4.88 6 6.10 6 6.10 6 6.10																
1629.20 - 3 $1629.20 - 3$ $1628.20 - 4$ $1628.20 - 4$ $1628.20 - 4$ $1628.20 - 4$ $1628.20 - 4$ $1627.20 - 5$ $1627.20 - 5$ $1627.20 - 5$ $1627.20 - 6 - 6.10$ 6.10 6.10 6.10			2.80	С							2.80					
1628.20 - 4 $1628.20 - 4$ $1628.20 - 4$ $1627.20 - 5$ $1626.20 - 6 - 6.10$ $1626.20 - 6 - 6.10$ $1626.20 - 6 - 6.10$ 6.10	1629.20	-3										Moist, der estimated	nse, brown 20% slight	Silty Gravelly S lv plastic fines.	and with 60-70%	
1628.20 - 4 $- 4.27 - 0$ $- 4.27 - 0$ $- 4.88$		-										fine to coa	arse sand, '	10-20% gravel.	Abundant	
1628.20 - 4 - 4 - 4.27 - D		-										hard volca	anic and de lers.	composed gran	itic cobbles	
1628.20 - 4 - 4 - 4.27 - D		-														
$1625.20 + \frac{4}{4.27} + \frac{4.27}{5} + \frac{4.27}{5} + \frac{4.88}{5} + \frac{4.88}{5} + \frac{4.88}{5} + \frac{1627.20}{5} + \frac{6}{5} + \frac{6}{5} + \frac{1}{5} + $	1628.20	Ĺ														
$1627.20 \begin{array}{c c c c c c c c c c c c c c c c c c c $	1020.20	-4	4.27	_												
$1627.20 - \frac{4.88}{5} = \frac{1}{6} + \frac$		_		D						SW		Clay lense	e 0.3 meter	s thick.		
$1627.20 + \frac{4.88}{5} = \frac{4.88}{5} = \frac{1}{5} $		-								Sivi						
1627.20 - 5 $- 5$ $- 6 - 6.10$ $- 6 - 6.10$ $- 6 - 6.10$ $- 6 - 6.10$		-	4.88	E						4						
$1626.20 - \frac{6}{6.10} = \frac{6.10}{6.10}$	1627.20	-5														
$1626.20 - \frac{-6}{6.10} - \frac{6.10}{-1} - 6.$		-														
$1626.20 + \frac{6}{6.10} + \frac{6}{6$																
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	ິ 1624.20	+8														
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					S		<u> </u>	18/08							54 00 " D"	SHEET 1 OF 1
					E	ND DATE		10/90	 Eroowov E	vtonci	on Projo	~+		STATION	54+92 "P"	
					JC	DB DESCRI	PTION	1-500		xtensi	on Projec	<i>.</i>		OFFSET	1.59 LT	
	204				LC	DCATION			Jounty, Nev	ada				ENGINEER	Acker	
	2Mm	2	3		BO	ORING	05	5+00	-						Peterson	
	T.		7		E.	A. #		079-01-	<u>`</u>				LEVEL			
	Že	~			G	ROUND EL	EV16	637.45 (m)		9/18/98	NE		METHOD	HQ Core	
					H	AMMER DR	OP SYS	STEM	lope - Cathe	ead				BACKFILLED	_Yes DA	TE 9/18/1998
	ELEV.	DEP	тн	SAM	MPLE	BLOW CO		Percent		USCS		МАТІ				PEMARKS
	(m)	(m	า)	NO.	TYPE	Increments	300 mm	Recov'd	LAB 11313	Group	_					REMARKS
		- '	0.00							CL		50-60% m	r, brownisn nedium to h	igh plastic fines.	30-40%	
		-									0.46	fine to coa	arse sand, '	10% gravel. Sur	face	
		F		Δ					W PL SV			Moist, der	nse, brown	Silty Gravelly S	and.	
	1636.45 -	_ 1							w, i i, ov			Abundant	decompos	ed granitic cobb	les with	
	1000.10	F.										zones with	n clayey fin	es.		
		-	1.52													
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	1005 15	-								SIVI						
	1635.45 -	2														
		F		В					Sh							
		-														
		-														
	1634.45 -	-3	3.05								3.05					
		-														
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5D.G	1628.45 -	-9														
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				S		<u>9/</u>	18/02					F0 (1)	SHEET 1 OF 1
				El	ND DATE	-9/	10/30		vtonoia	n Project	STATION	<u>56+44 "P"</u>	
				JC	DB DESCRI	PTION	1-00U		xtensic		OFFSET	31.28 RT	
	24			LC	OCATION			Jounty, Ne	aua		ENGINEER	Acker	
	2 Mr. M			B	ORING	0		-	[Peterson	
	A.			E.	A. #		079-01-	D					
	Ž.			G	ROUND EL	EV16	644.37 (m)		9/18/98 NE	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_Yes DA	ге <u>9/18/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.00							CL	Moist, stiff, brown San 60-65% medium plas sand. Minor gravel ar	ndy Clay with e tic fines, 35-409 id cobbles. Surf	stimated % very fine face	
		-	А					w, PI, Sv		Moist, dense, brown	s. Silty Sandy Gra	vel with	
	1642.27	-								estimated 15% slight	y plastic fines,	40-45%	
	1043.37 -	– '								comprise up to 20% c	of mass.	Seiddo	
		1.37							-				
		-	В					₩, ₽I, Sv	1				
	4040.07	-											
	1642.37 -	- 2 29											
		-							1				
		2.74	C										
		-							1				
	1641.37 -	-3											
			D					w, PI, Sv	GM				
		-								Few to no cobbles at	3.5-5.5 meters.		
		3.81							-				
	1640.37 -	-4											
		4.57	E					w, PI, Sv	-				
		-	F										
	1639.37 -	-5											
		5.33							-				
		_											
		-								5 94			
	1638.37 -	6 6.10	G					w, PI, Sv,		Soft to moderately ha	rd, fractured, hi	ghly	
		-	Ĥ					sn w, PI, Sv		weathered, dark grey Bedrock.	to brick red An	desite	
		- 6.86											
	1637.37 -	-7											
		-											
		Ľ											
1/01		-	1										
T 5/1	1636.37 -	-8											
T.GD		8.38								Zone of highly weather	ered and degrad	hed	
DO									1	formation.			
N r		F	J										
D.GP,	1635.37 -	-9 014								0.1/			
<u>3015[</u>		9.14	1							9.14			
100		F											
DOT		Ĺ											
N													

					_		o/	17/08			EXPLC	RATIO	N LOG			
					ST		<u> </u>	18/02							F0 (F) F .	SHEET 1 OF 3
					E١	ND DATE	- 9/	10/30	Freewoy F	vtonoia	n Proinc	+		STATION	58+15 "P"	
					JC	DB DESCRI	PTION	006-1		xtensic	Sh Projec			OFFSET	<u>11.33 RT</u>	
					LC	OCATION			Jounty, INE	aua				ENGINEER		
	2WM	6			BC	ORING	05	8+10						EQUIPMENT	Peterson	
	Z.		_		E.	A. #	00	079-01-5)		GROUN					
	Ž.	1			GI	ROUND EL	EV16	635.72 (m)		9/18/98	NE		METHOD	HQ Core	
					HA	AMMER DR	OP SYS	STEMR	Rope - Cath	ead				BACKFILLED	_YesD	ATE9/18/1998
	ELEV. (m)	DEPT (m)	Ή 1	SAN NO.	/IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DI	ESCRIPTION		REMARKS
		0.	.00									Moist, der	nse, brown	Silty to Clayey	Sandy	Placed casing to
		-										plastic fine	es, 25-35%	fine to coarse s	sand,	sample
		-		A1					w, PI, Sv, Sh			50-60% gi	ravel. Abur	idant cobbles ar	nd boulders.	recovered.
		F .														
	1634.72	+1 _ 1.	.22													
		_														
		-		A2												
		1.	.83			18				-						
	1633.72 ·	-2 _{2.}	.13	Α		46	50/76									
		- 2.	.29	_		50/76				-						
		-		в												
		-														
	1632.72 ·	<u>-3 3</u>	.05	c					w, PI, Sv	-			th fower of	ov finan and fou	or	
		-										boulders.		ay lines and lew	ei	
		3.	.66													
		-														
	1631.72 ·	-4								GC						
		-										۸ او	h a	uia askhlas asu		
		-		D								more than	1 40% of to	tal mass.	iprising	
	1630.72 ·	-5 _	4.0													
		5.	.18							-						
		-														
		-														
	1629 72	- 6 6	10	E								Large har	d volcanic l	boulders.		
	1020112	-		F					w, PI, Sv	1						
		-														
		- 6.	.71							4						
	1628 72	_ _														
	1020.72	'														
		-		G								Abundant	cobbles wi	th silty sand ma	trix. Few	
11		-		5							'	decompos	sed granitic	cobbles.		
5/11/(/ a a = -	-									7.92					
DT (1627.72	8 8.	.23									Moist, der Gravel Fe	nse to very	dense, brown S	ilty Sandy	
OT.G		-								1						
D_ A		-														
۹ Ld		F														
5D.G	1626.72 ·	9 9.	.14	H					W PL Sv	1						
7901				•					, , , , , , , , , , , , , , , , , , ,							
<u>т</u> ос		+ ~	75													
/_DC		9.	./5							-						
ź								1			1					
END DATE 9/1/90 SHET 2 OF 2 PRO DATE 9/1898 STATTON 564-15 PP OB DESCRIPTION U-SAR County, Nevada OPTSET 1/13 RT DORING 068+10 County, Nevada Polesion BORING 068+10 County, Nevada Polesion BORING 069+10 County, Nevada Polesion BORING 069-10-5 County, Nevada Polesion GROUNDWATE 100079-01-5 County, Nevada Polesion GROUNDWATE 100079-01-5 County, Nevada Polesion HUB NE Nevements 000 nm Record Lat Tests 10000 HUB NE 1000 nm Nevements 000 nm Record Lat Tests 10000 HUB NE 1000 nm 1000 nm 1000 nm 1000 nm Nevements 000 nm Record HUB NE 1000 nm 1 1 1 1 1 HUB NE 1 1 1 1 1 1 1 HUB NE 1 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>0/</th> <th>17/02</th> <th></th> <th></th> <th>EXPL</th> <th>ORATIO</th> <th>N LOG</th> <th></th> <th></th> <th></th>							0/	17/02			EXPL	ORATIO	N LOG			
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END DATE Bit Product STATION Bit 15 °P 1/20 DESCRIPTION 1:880 Froeway Extension Project Prevents 11.33 RT 1/20 DESCRIPTION 1:880 Froeway Extension Project Prevents Construction Prevents 00000 058-10 0070-01-5 Construction Prevents Construction Construction Construction Construction Construction					ST	FART DATE	<u> </u>	18/09								SHEET 2 OF 3
Image: Control index products in the contro					E١	ND DATE	9/	10/90	Eroower 5	vtonai	n Brois	~ +		STATION	58+15 "P"	
EXAMPLE Component <					JC	DB DESCRI	PTION	00C-I		xtensic	n Projec	<i>.</i>		OFFSET	<u>11.33 RT</u>	
BORING DUDUTIO E.A. # 007301-5 GROUND ELEV. GROUND ELEV. DATE DEPTHY Peterson HQLANG		- An-			LC	DCATION		20,10	Journy, Nev	aua				ENGINEER	Acker	
LA DUSTO 12 GRUIND ELEV. 003572 (m) (01000 100 100 100 100 100 100 100 100 1		WWW			BC	ORING	0	70 01 4			CROU				Peterson	
BROWN BELEF. Deptile METHOD METHOD METHOD To Come BACKFILLED Userset BACKFILLED Yes Date 9/16/988 EW DPPTH MATERIAL DESCRIPTION BACKFILLED Yes Date 9/16/988 Image: State Sta		1			E.	A. #		25 72 (m)		DATE	DEPTH m	ELEVEL	DRILLING		
BALLE Description Its Date Processes Date Date <thdate< th=""> <thdate< th=""> Date</thdate<></thdate<>					GI	ROUND EL	EV	555.72 (E	nn) Rono Cath		9/18/98	NE		METHOD		0/19/1009
ILDU. DEPTH SAULTER BOWERDAWN Percent INFORMATION Rescars 100 No WW WW Processing 300 mm No					HA	AMMER DR	ROP SYS	STEM		eau				BACKFILLED	DA	TE
182.42 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 -11 <t< td=""><td></td><td>ELEV. (m)</td><td>DEPTH (m)</td><td>SAN NO.</td><td>MPLE TYPE</td><td>BLOW Co 150 mm Increments</td><td>OUNT Last 300 mm</td><td>Percent Recov'd</td><td>LAB TESTS</td><td>USCS Group</td><td></td><td>MATI</td><td>ERIAL DE</td><td>ESCRIPTION</td><td></td><td>REMARKS</td></t<>		ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW Co 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DE	ESCRIPTION		REMARKS
182472 11 Abundant cobbles and zones of gravel. 182472 11 Abundant cobbles and zones of gravel. 182472 12 K 182472 13 Abundant cobbles and zones of gravel. 182472 13 Abundant cobbles and zones of gravel. 182472 13 Abundant cobbles and zones of gravel. 182472 14 Abundant cobbles and zones of gravel. 182472 15 M 182472 15 M 182472 16 Abundant cobbles and zones of gravel. 182472 16 Abundant cobbles and zones of gravel. 182472 17 Abundant cobbles and zones of gravel. 1814 Soft, highly fractured, highly weathered dark grey Andesite Bedrock. 18247 19.8			-	J												
1924.72 -11.78		400470	-									Abundant	cobbles an	d zones of grav	el.	
1823.72 -12 K Small hard volcanic boulders. 1827.72 -13 Image: Construct of the second		1624.72 -	- 11 - 11.28													
182372 -12 K Small hard volcanic boulders. 182372 -13 - - 182172 -14 - - 18272 -15 M - 18272 -15 M - 181972 -16 - - 181972 -17 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 181972 -18 - - 18197 - - - 18197 - - - 18197 - - - 18197 - - - 18197 - - <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			-							1						
102372 -12 K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K<			-									Small har	d volcanic b	oulders.		
1822 72 -13 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		1623.72 -	- 12	K												
Instruction Image: Construction			-	r.												
Interview Inter			-													
1622.72 -13 L Image: Constraint of the second			12.80													
1621.72 -14 -14.33 1620.72 -15 M 1620.72 -15 M 1619.72 -16 -16 1619.72 -16 -17 1618.72 -16 -17 1618.72 -17 -17 1618.72 -18 0 1618.72 -18 0 1618.72 -18.90 -18.14 1618.72 -18.90 -18.14 1618.72 -18.90 -19.81		1622.72 -	- 13							GM						
1621.72 -14 -14 -14 1620.72 -15 M			-													
1621.72 -14 14.33 Image: constraint of the second se				L												
1621.72 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14 <			-													
1620.72 -15 M M Large hard boulder. 1619.72 -16 Clean gravelly sand lense 0.2 meters thick. 1619.72 -16 M M 1619.72 -16 M M 1619.72 -16 M M 1619.72 -16 M M 1619.72 -17 M M 1618.72 -17 M M 1618.72 -17 M M 1618.72 -17 M M 1617.72 -18 O M 1617.72 -18.90 M M 1616.72 -19 -19 -19.81 18.80 -19.81 -19.81 -19.81		1621.72 -	- 14													
1620.72 -15 M M Large hard boulder. 1619.72 -16 Clean gravelly sand lense 0.2 meters thick. 1619.72 -17 -16 Clean gravelly sand lense 0.2 meters thick. 1619.72 -17 -17 -17 1617.72 -18 0 -18.14 1616.72 -19 -19.80 -19.81 1616.72 -19 -19.81 -19.81			⁻ 14.33							-						
1620.72 -15 M M Large hard boulder. 1619.72 -15.85 M Clean gravely sand lense 0.2 meters thick. 1619.72 -16 Clean gravely sand lense 0.2 meters thick. 1618.72 -17 -16 1618.72 -17 -17 1618.72 -17 -18 1616.72 -18.90 -18.14 1616.72 -18.90 -18.14 1616.72 -19.90 -19.91			-													
1620.72 -15 M Large hard boulder. 1619.72 -16			-													
VIND TOPOGRAPHIC PROPERTY IN THE PROPERTY INTERPROPERTY INTERPROPERY INTERPROPERTY INTERPROPERTY INTERPROPERTY INTERPROPERT		1620.72 -	- 15	М								Large har	d boulder.			
1619.72 -16			-													
1619.72 -16 -16 -16 -17 -16 1618.72 -17 -17 -17 -17 -17 1618.72 -17 -17 -17 -17 -17 1618.72 -17 -17 -18.14 -18.14 1617.72 -18.90 -18.90 -18.90 -18.14 1616.72 -19 -19 -19 -19 18.96 -19.80 -19.81 -19.81			-									Clean gra	velly sand I	ense 0.2		
1618.72 -17 1618.72 -17 1618.72 -17 1617.72 -18 0		1619 72 -	- 15.85							-		meters thi	ICK.			
1618.72 -17 -17 -17 1617.72 -18 0 -18.14 1617.72 -18.90 -18.90 1616.72 -19 -19.90 1616.72 -19 -19.96 -19.81		1013.72	-													
1618.72 -17 N 17.37 1618.72 -17 -17.37 -17.37 1617.72 -18 O -18.14 1616.72 -18.90 -18.90 1616.72 -19 -18.90 1616.72 -19 -19.96 19.96 -19.81			-													
1618.72 -17 -17 -17 17.37 -17.37 -18.14 1617.72 -18 0 -18.14 1616.72 -18.90 -18.90 -18.14 1616.72 -19 -19 -19.96 19.96 -19.81 -19.81				Ν												
V0100 International methods Internation		1618.72 -	-17													
1617.72 -18 0 18.14 1617.72 -18 0 18.14 1617.72 -18.90 -19 1616.72 -19 19.96 -19.81			17.37													
1617.72 -18 0 18.14 1617.72 -18 0 - 1617.72 -18 0 - 1617.72 -18.90 - Soft, highly fractured, highly weathered dark grey Andesite Bedrock. 1616.72 -19 - - - 1616.72 -19 - - - 19.96 - - - -			_							1						
1617.72 18 0 18.14 1617.72 18 0 Soft, highly fractured, highly weathered dark grey Andesite Bedrock. 1616.72 18.90 18.14 18.14 1616.72 19 19.96 19.81	11/01		-													
1616.72 - - - Soft, highly fractured, highly weathered dark grey Andesite Bedrock. 1616.72 - - - 19.96 - - -	DT 5/-	1617.72 -	- 18	0							18.14					
Green and Construction	DT.GD		-	0								Soft, high	ly fractured	highly weather	ed dark	
1616.72 - 18.90 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -			Ĺ									groy And		v it.		
1616.72 19 - - - - 19.96 -	N N		- 18.90													
P 19.96	15D.G	1616.72 -	- 19													
	07901		-	Þ												
19.96 19.81	0 T 0		-	.							10.01					
			19.96							<u> </u>	19.81					

						Q/*	17/08			EXPL	ORATIO	N LOG			
				ST	FART DATE	 //	10/00								SHEET 3 OF 3
				E	ND DATE		10/90	Eroowov E	vtonoio	n Droio	~ +		STATION	58+15 "P"	
				JC	DB DESCRI	PTION	1-000		vodo	пгюје	JL		OFFSET	MG	
	- Arr			LC	DCATION			Journey, Nev	aua				ENGINEER	Acker	
	WWW B			BC	ORING	0	70 04 /	_		000				Peterson	
	1			E.	A. #		05 70 () 					DRILLING		
	J.			GI	ROUND ELI	EV16	35.72 (m) Nama Oathu		9/18/98	NE		METHOD	HQ Core	0/40/4000
				HA	AMMER DR	OP SYS		cope - Cathe	ead				BACKFILLED	Yes D	ATE 9/18/1998
	ELEV.	DEPTH	SAI NO.	MPLE TYPE	BLOW CO	DUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
	(11)				Increments	<u>300 mm</u>	Recova				Hard, frac	ctured, weat	hered Andesite	Bedrock.	9-17-98 /
		_									More corr	npetent with	deptn.		9-18-98
		-	Q												
		-													
	1614.72	21													
		21.34								21.34					
		-													
		-													
	1613.72	-22													
		_													
		-													
	1010 70	-													
	1612.72	-23													
		-													
		-													
	1011 70	-													
	1611.72	24													
		-													
		-													
	1610 70	-													
	1010.72	-25													
		-													
		-													
	1600 72	-													
	1609.72	-20													
		-													
		-													
	1608 72	27													
	1000.72														
		F													
,01		-													
5/11/	1607 72	- 28													
GDT	1007.72	20													
).TOC		-													
NV_L		F													
GPJ	1606 70	20													
015D.	1000.72	29													
0079		F													
DOT		F													
NV_E															

Ĩ						8/	18/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	18/00						SHEET 1 OF 2
				EI	ND DATE	0/	10/99	Erooway E	vtonci	n Project	STATION	58+34 "P"	
				JC	OB DESCRI		1-000		vodo		OFFSET		
	- Am			LC	OCATION		20124	Sourity, Nev	aua		ENGINEER	Acker	
	S. Way	Contraction of the second		B	ORING	0	00+04					Peterson	
	Ţ			E.	.A. #) (m)		DATE DEPTH m ELEVEL	DRILLING		
	1º			G	ROUND EL	EV16	527.75 ((m) Dama Oath		8/18/99 NE	METHOD	HQ Core	0/40/4000
				H.	AMMER DF	ROP SYS	STEM _	kope - Cath	ead		BACKFILLED	YesDA ⁻	TE8/18/1999_
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	1626.75 -	- - - -								Brown, dry to slightly hard, weakly cemente Clayey Sand With Gr . low to medium plastic sand, 25% fine to coa grey andesite.	moist, soft to m ed to well ceme avel , with estim fines, 45% fine rise gravel with	noderately nted, lated 30% to coarse cobbles of	
		1.52	2							Moderately severe we	eathered volcar	ic cobble.	
		1.83	A	SPT	50/51	50/51	50			Sand lense.			
	1625.75 -	-2											
		-								0.44			
		_ 2.44	В	SPT	50/76	50/76	50			Brown, moist, soft to a	moderately har	d, Sandy	
		- 2.90			00,10				CL	medium plastic fines,	30% fine to co	arse sand,	
	1624.75 -	_3								20% fine to coarse gr	avel.		
										3.35 Fresh velcanic cobble			
		-									:5.		
		-											
	1623.75 -	-4								4.11	0	0	
										Brown, moist, son, Ci	ayey Sand with	i Gravel.	
		-											
		-											
	1622.75 -	-5							sc				
		_											
		-											
	1621.75 -	-6								6.10			
										Fresh volcanic cobble	es.		
		-											
	1620.75 -	-7								7 10			
		-								Unknown lithology - N	lo Recovery (Sa	and?)	
11/01		-											
T 5/'	1619.75 -	-8											
T.GD		-											
DO													
N ۲		_											
D.GP	1618.75 -	-9								8.99 Brown moist soft CI	avev Sand with	Gravel	
9015		-								Fresh volcanic cobble).		
r 007		L											
DOD		_							SC				
N													

						0/	19/00			EXPL	ORATIO	N LOG			
				SI	ART DATE	<u> </u>	10/99								SHEET 2 OF 2
				E١	ND DATE	8/	18/99	 			-1		STATION	58+34 "P"	
				JC	B DESCRI	PTION	1-580	Freeway E		on Projec	X.		OFFSET	6.72 RT	
				LC	OCATION		ashoe (County, Nev	ada				ENGINEER	Acker	
	2MM			BC	ORING	05	8+34						EQUIPMENT	Peterson	
	Z.			Ε.	A. #	00	79-01-5)		GROU				1 01010011	
	ž.			GI	ROUND EL	EV. 16	627.75 (m)		8/18/99	NE	ELEV. M	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	tope - Cathe	ead				BACKFILLED	Yes DA	TE <u>8/18/1999</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT	Percent		USCS		MATI				DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB 12313	Group						REMARKS
		-									Fresh vol	canic cobbl	a.		
		-								10.52					
		_													
	1616.75 -	-11													
		-													
		Ľ													
	1615.75 -	-12													
		-													
		_													
	1614.75 -	-13													
		-													
		_													
		-													
	1613.75 -	-14													
		-													
		_													
		-													
	1612.75 -	- 15													
		-													
		_													
		-													
	1611.75 -	-16													
		-													
		-													
	1610.75 -	-17													
		-													
		_													
11/01		-													
T 5/1	1609.75 -	-18													
T.GD		-													
D0/		Ĺ													
ړ ۲		-													
SD.GF	1608.75 -	- 19													
79015		-													
T 00		Ē													
DO		_													
ź			1												

							Q/	14/00			EXPLORATION LOG			
					S		= <u>0/</u> 	15/90						SHEET 1 OF 3
)		E			10,99 _580	Freeway F	xtensio	n Project	STATION _	58+73 "P"	
					JC	DB DESCRI	PTION \//	ashoo (/ada		OFFSET _	MG	
	22				LC	DCATION		8+76		aua			Acker	
	× N	b	5		BC	DRING		70_01_6	5				Peterson	
	1 miles				E.	A. #	16	N3 83 (m)		DATE DEPTH m ELEV. m	DRILLING		
	le le				GI	ROUND EL	EV	03.83 (E	lin) Popo Cath		8/15/99 NE	METHOD _		8/16/1000
		` `			HA	AMMER DR	ROP SYS	STEM				BACKFILLED	DA1	TE
	ELEV. (m)	DEI (r	PTH n)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-									Hard, highly fractured grey Andesite Bedro	l, slightly weather ck .	ed, dark	
		-									31, 111			
		-												
	1602.83 -	1												
		-												
		-												
		-												
	1601 83 -	Ĺ,												
	1001100	_												
		-	2.44	Δ	SPT	50/0	50/0			-	Vory thin clay fracture	infilling		
			2.00		511	30/0	30/0			-		e mining.		
	1600.83	3												
	1000.00	Ļ												
		-												
		-												
	1500.92	Ē,									3.96			
	1599.05	-									Soft to slightly hard, h shattered, dark grey	highly weathered, Andesite Bedrocl	k.	
		-									3.,			
		-												
	1508.83	5												
	1090.00	-												
			5.49											
			5.64	В	SPT	50/140	50/140			-				
	1507.92													
	1597.63	T °												
		-												
		-												
	1506 00		7.01											
	1090.03		7.16	С	SPT	50/0	50/0]				
		-												
11		-									Slightly more compet	ent with fewer fra	ctures	
5/11/(-												
DT (1595.83	8												
OT.G		_												
NV_D		-									Soft and shattered wi	th clay infilling.		
I L d E		F										-		
15D.C	1594.83	-9												
0620		_												
OT 0		F												
N_D			9.91							1				
Z		1		I		I	1	1		1	1			

						/م	14/00			EXPLORATION LOG			
				ST	TART DATE	=	14/99						SHEET 2 OF 3
				El	ND DATE	8/	15/99			D : <i>i</i>	STATION	58+73 "P"	
				JC	OB DESCR	IPTION	1-580	Freeway E	xtensio	on Project	OFFSET	<u>6.95 L I</u>	
	. Des			LC	OCATION		ashoe (County, Nev	ada		ENGINEER	Advar	
	1 Mm			BC	ORING	05	58+76				EQUIPMENT	Peterson	
	Ĩ,			E.	A. #	00	079-01-5	5		GROUNDWATER LEVEL		1 61613011	
	ž.			GI	ROUND EL	EV16	603.83 (m)		DATE DEPTH m ELEV. m 8/15/99 NF	METHOD	HQ Core	
			1	HA	AMMER DF	ROP SYS	STEM_R	lope - Cathe	ead		BACKFILLED	_YesD/	ATE 8/16/1999
		DEDTU	SA	MPLE	BLOW C	QUNT	_		11808				
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		10.06	D	SPT	50/76	50/76			1	40.00			
		-								10.36 Slightly hard to mode	ratelv hard. slig	htlv	
		-								fractured, highly to m	oderately weath	nered, red	
	4500.00	-								brown to grey Andes	te Bedrock.		
	1592.83	11											
		_											
		-											
		-											
	1591.83	- 12								12 19			
		-								Soft to slightly hard, r	non-fractured, h	ighly	
										weathered, grey And moderately hard to ha	esite Breccia . C ard.	Clasts are	
		_											
	1590.83	- 13											
		-											
		-											
	1589.83												
		-											
		-											
		-											
	1599.92	15											
	1300.03	- 15											
		-											
		-											
		-											
	1587.83												
		_											
		-											
	1586.83	-17								O de la character de la del	(
		-								Color change to red t	brown for 0.5 me	eters.	
		17.53	F	SPT	50/64	50/64			-				
11/01					00,04	00,04			1				
T 5/1	1585.83	- 18											
L.GD.		F											
DO		-											
N		Ľ											
GPJ	1584.83	-19											
015C		+											
0079		F											
<u>от</u>		F											
NV_L		-											

						Q/	11/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	14/99						SHEET 3 OF 3
				EI	ND DATE	8/	15/99			- Ducient	STATION	58+73 "P"	
				JC	OB DESCRI	PTION	1-580	Freeway E	xtensio		OFFSET	6.95 LT	
	54			LC	OCATION			Jounty, Nev	ada		ENGINEER		
	2Mm			B	ORING	05	08+76	_	r		EQUIPMENT	Peterson	
	4			E.	.A. #		079-01-)		GROUNDWATER LEVEL	DRILLING		
	l			G	ROUND EL	EV. 16	03.83 (<u>m)</u>	— E	8/15/99 NE	METHOD	HQ Core	
				H.	AMMER DR	OP SYS	STEM _	kope - Cathe	ead		BACKFILLED	Yes DA	TE 8/16/1999
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)			Increments	300 mm	Recov'd		Cicup				
		-											
	1582.83	-21											
		-											
		_								Slightly hard to mode	rately hard zone	e.	
		-											
	1581.83	-22											
		Ľ											
		_											
		-											
	1580.83	-23											
		_											
		-											
		-											
	1579.83	-24											
		_											
		-								Slightly fractured.			
		-											
	1578.83	-25											
		_											
		-											
		-											
	1577.83	-26											
		-											
		-											
	1570.00	- 27											
	13/6.83	<u> </u>											
		-											
01		-											
5/11/	157E 02												
GDT	1075.83	- 20											
).TOC		+											
NV_L		+											
GPJ	1574 02	- 20											
015D.	1374.83	29											
0079(F											
DOT		F								00.07			
NV_E		-								29.87			

							Q /-	10/00			EXPL	ORATIO	N LOG			
					S	TART DATE	= <u>0/</u>	20/00							FO 11 "-"	SHEET 1 OF 4
)		El	ND DATE	0/2	20/33		vtonci	n Droio	et		STATION	59+41 "P"	
					JC	OB DESCR		1-500		xtensi	JITFIOJE			OFFSET		
	24	à la carta da l			LC	OCATION		a5100 (aud				ENGINEER	Acker	
	5 Mar	8	A		B	ORING	0	9+4Z			0001				Peterson	
	The second se				E.	A. #		05 40 () m)		DATE	DEPTH m	ELEVEL FLEV.m	DRILLING		
	le le	,			G	ROUND EL	EV10	05.49 (m)		8/20/99	NE		METHOD	HQ Core	
			///		H	AMMER DF	ROP SYS		cope - Cath	ead				BACKFILLED	Yes DA	TE8/20/1999_
	ELEV. (m)	DEI (r	PTH n)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
	1604.49 -	- - - -										Brown to g very dense with 15% coarse sa contains in	grey, dry to e, CLAYEY medium pla nd, 15% fin nterbeds of	slightly moist, c SAND WITH GI astic fines, 70% e to coarse grav Sandy Clay.	lense to RAVEL fine to vel. Unit	
		-														
		-	1.52			15				sc						
		Ľ	4.04	А	SPT	30	80	83	w, PI, Sv							
	1603.49 -	-2	1.91			50				-						
		F														
			2.44			16				-						
			2.82	В	SPT	27 27	54	83								
	1602.49 -	-3	3.05	B1					W PL SV]	2.96	Red brow	n to arev h	ichly fractured		
		-		ы					w, F1, 3v			moderatel	y to highly	weathered AND	ESITE	
		F										bedrock.				
		-														
	1601.49 -	4														
		+														
		-	4.42 4.52	С	SPT	50/102	50/102	75								
		-	4.00								1.00					
	1600 49 -	-5	4.88	C1					w, PI, Sv		4.88	Red grey	to red brow	n, highly to com	pletely	
	1000.10	Ļ										weathered		E bedrock.		
		-														
		-	5.73			25				_						
	1500/0 -	6	5.98	D	SPT	35 50/140	50/140	87	w, PI, Sv							
	1555.45	Ļ														
		-														
		-														
	1509.40	7														
	1390.49	F.														
		F									7.56					
01		F									7.50	Dark grey	, unfracture	d, fresh ANDES	SITE	
5/11/(4507 12	F_									7.92	bedrock.				
DT	1597.49 -											Dark brow ANDESITI	/n to grey, c E bedrock.	completely weat	hered	
DT.G		F														
NV_L		F														
3PJ		F														
15D.C	1596.49 -	-9	9.08	-	CDT	48	50/407	01		-						
0620		<u> </u>	9.34	E	571	50/127	50/12/	91	w, ri, sv		9.36	Dark brow	in moderat	aly fracturad m	oderatoly	
0 TC		F										weathered	ANDESIT	E bedrock.	oueralery	
		-														
2		1			1	L	1	1	1	1						

						ړ و	10/00			EXPLORATION LOG			
				S	TART DATE	0/	20/00						SHEET 2 OF 4
				El	ND DATE	_ð/	20/99	Erooway F	vtona:	n Project	STATION	<u>59+41 "P"</u>	
				JC	DB DESCRI	PTION	1-580		xtensi	on Project	OFFSET	<u></u>	
		.		LC	OCATION			Jounty, Ne	ada		ENGINEER		
	2WM			B	ORING	05	9+42				EQUIPMENT	Peterson	
	Ą			E.	A. #	0	079-01-5	D		GROUNDWATER LEVEL			
	Ž.			G	ROUND EL	EV16	605.49 (m)		8/20/99 NE	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_YesDA1	E 8/20/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-								10.06 Brown to grey, highly slightly weathered AN (Possible pyroclastic f	fractured to sha IDESITE bedroo flow).	attered, ck.	
	1594.49 -	+11 											
	1593.49 -	-12 12 10											
		- 12.10	E1					w, PI, Sv		Red brown highly frac	ctured highly to	<u> </u>	
	1500 40	-								completely weathered	PYROCLASTI	C FLOW.	
	1592.49 -	- 13											
		_											
		12 79											
		- 13.87	F	SPT	50/89	50/89	100		-				
	1591.49 -												
		-											
		-											
	1590.49 -	-15 15 24											
		_ 10.24	G					w, PI, Sv	-				
		_											
		-											
	1589.49 -	- 16								16.18			
		-								Red brown to grey, sl	ightly to highly	fractured,	
		_								slightly to moderately bedrock.	weathered AN	DESITE	
		-											
	1588.49 -	-17											
		-											
1/01		_								17.80			
T 5/1	1587.49	- 18								Brown and grey mottle completely weathered	ed, moderately I PYROCLASTI	to C FLOW.	
T.GD		-											
DO		L											
NN r		F											
D.GP.	1586.49	- 19											
9015[_											
3200		+											
DOT		Ľ											
N													

						0/-	10/00			EXPL	ORATIO	N LOG			
				SI	FART DATE	<u> </u>	19/99								SHEET 3 OF 4
				E١	ND DATE	8/2	20/99			_ .			STATION	59+41 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Proje	ct		OFFSET	7.68 RT	
				LC	OCATION	W	ashoe (County, Nev	/ada				ENGINEER	JRO	
	Mar	to p		BC	ORING	05	9+42		,				EQUIPMENT	Acker	
	- A			Е.	A. #	00	79-01-5	5		GROU	NDWATER	RLEVEL	OPERATOR	Peterson	
	1 and 1			GI	ROUND FI	_{EV.} 16	05.49 (m)		DATE	DEPTH m	ELEV. m	DRILLING METHOD	HQ Core	
				ц.				ope - Cath	ead	8/20/99	NE			Yes	TE 8/20/1999
								•	L				DAORITIELED	Dr	
	ELEV.	DEPTH (m)	NO.	TYPE	150 mm	Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
	()	(,			Increments	300 1111	Kecov u								
		_													
		_													
	1584.49 -	-21													
		-													
		-								21.52					
		-									Grey, slig	htly to mode	erately fractured	d clav filled	
	1583 /0 -										fracture z	one at 72.0	feet.		
	1505.45									22.25					
		_								22 52	Dark brov	vn, complete	ely weathered		
		-								22.02	Red grey,	highly fract	ured to shatter	ed, slightly	
		-									to modera	ately weather	redANDESITE	bedrock.	
	1582.49 -	-23													
		_													
		-													
	1581.49 -	- 24													
		-								24.20	Red arev	slightly frag	tured slightly w	veathered	
		-								24.51	ANDESIT	E bedrock.			
		-									Red grey shattered	to red brow	n, highly fractur noderately wea	thered	
	1580 49 -	-25									ANDESIT	E bedrock.			
	1000110	-													
		-													
		-													
		-													
	1579.49 -	-26													
		[
		Ļ													
		-													
	1578.49 -	-27													
		-													
		-								07.00					
1/01										27.68	Red brow	n to red are	v. highly fractur	red to	
5/11	1577.49 -	-28									shattered	, slightly to i	moderately wea	athered	
GDT		-									ANDESIT	E Dedrock.			
DOT.		-								20 50					
		F								28.59	Grey, mo	deratelv frac	tured, sliahtly v	veathered	
ЗРJ		-									ANDESIT	E bedrock.			
15D.C	1576.49 -	- 29								29.20					
.0620		[Grey, sha	attered, mod	erately to highly	y	
<u>ЭТ 0(</u>		F								29.66	weamere	a ANDESIT	Deurock.		
		-									Grey, mo	derately to h	highly fractured,	, slightly	
ź		1									weathere	a ANDESITI	- Deulock.		

						Q/-	10/00			EXPLO	ORATIO	N LOG			
				ST	FART DATE	0/	20/00								SHEET 4 OF 4
				E١	ND DATE	_0//	20/99	 					STATION	59+41 "P"	
				JC	DB DESCRI	PTION	1-580		xtensic	on Projec	π		OFFSET	<u>7.68 R I</u>	
	204			LC	DCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			BC	ORING	05	9+42]	EQUIPMENT	Peterson	
	- A			Ε.	A. #		79-01-5) \					DRILLING		
	V			GI	ROUND EL	EV16	05.49 (m)		8/20/99	NE		METHOD	HQ Core	
			N	HA	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead				BACKFILLED	Yes DA	TE 8/20/1999
Ī	ELEV.	DEPTH	SAN		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	140.		Increments	<u>300 mm</u>	Recov'd		Group						
		-													
										20.72					
		-								30.72					
	1574.49 -	-31													
		_													
		-													
	1573.49 -	-32													
		-													
		-													
	1572.49 -	-33													
		-													
		-													
	1571.49 -	- 34													
		_													
		-													
	4570.40	-													
	1570.49 -	-35													
		-													
		-													
	1560.40	-													
	1569.49 -	-36													
		_													
		-													
	1569.40	- 27													
	1300.49	- 31													
		-													
01		-													
5/11/	1567 /0 -	- 38													
GDT	1001.48	- 00													
DOT.		-													
Š		-													
GPJ	1566 49 -	39													
015D		- ~~													
0079		F													
DOT		t													
N															

					_		o/	14/08			EXPL	ORATIO	N LOG			
					S	TART DATE	= <u>-</u> 9/	15/00								SHEET 1 OF 3
					El	ND DATE	- 9/	10/80	Freewoy F	vtonoi	on Proise	∽t		STATION	<u>60+14 "P"</u>	
					JC	OB DESCRI	PTION	086-1				JI		OFFSET	11.73 L1	
	day.				LC	OCATION			Jounty, Nev	ada				ENGINEER		
	ZWW	C.	5		B	ORING		0+25]	EQUIPMENT	Peterson	
	Ĩ,	K	51		E.	A. #	00)79-01-8	5		GROU	NDWATER				
	n n n n n n n n n n n n n n n n n n n	7			G	ROUND EL	EV16	624.70 (m)		9/15/98	NE	ELEV. M	METHOD	Auger / HO	Q Core
				1	H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead				BACKFILLED	_YesD	ATE9/14/1998
	ELEV.	DE	PTH	SAI		BLOW C	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DI	ESCRIPTION		REMARKS
	(m)	(1	m) 0.00	110.		Increments 2	300 mm	Recov'd			·	Moist. der	nse to verv	dense. brown S	iltv	
		F	0.00	Α	SPT	7	50		w, PI, SV, Sh			Gravelly S	Sand with e	stimated 20-30%	6	
		_	0.40			43				_		10-30% g	ravel. Abur	dant Granitic ar	rse sand, Id Volcanic	
		L										cobbles a	nd boulder	s. Granitic bould	ers are	
	1623.70 -	-1										and only s	slightly wea	thered.	e very naru	Refusal at 1
		-														meter with
		F								SM						core.
		Ĺ														
	1622 70 -	[_2														
		F_														
		-														
		-														
		-									2.05					
	1621.70 -	-3	3.20								3.05	Moist, der	nse, brown	Silty Gravelly S	and with	
		Ļ	3.51	в	SPT	50/0	50/0		w, PI, Sv			estimated	20% non-p	plastic to slightly	plastic	
		-	0.01							-		gravel. Fe	w cobbles	and small bould	ers.	
		-														
	1620.70 -	-4														
		F										Alternatin	a hard Volc	anic and partial	v	
		Ľ	4 70									decompos	sed Granitio	cobbles and bo	oulders with	
		-	4.72	~	ODT	12	50					minor ma	trix from 4.3	3 - 5.8 meters.		
	1619.70 -	-5	5.03	C	5P1	50	50			-						
		F														
		F														
		Ľ														
	1618.70 -	6	6.10													
		F	2.10	_		20				1						
		F	6.55	D	SPT	17 14	31		w, PI, Sv							
		-								1						
	1617 70	_ _														
	1017.70 -	['														
		F														
1			7.62			12				-						
5/11/0		F		Е	SPT	19	41									
DT 5	1616.70 -	8	8.08			22				-		Silty Grav	elly Sand o	ontains low plas	tic fines	
DT.G		[with tew C		no boulders.		
V_D		F														
N N		F														
D.GF	1615.70 -	-9	9.14													
9015		-	0.45	E1	SPT	50/0	50/0		w, PI, Sv	1						
- 007		Ē	9.45							-		No cobble	es or boulde	ers present.		
DOT		E														
N																

				_		۵ <i>۱</i> -	1//08			EXPLO	ORATIO	N LOG			
				S	FART DATE	<u> </u>	14/90								SHEET 2 OF 3
				El	ND DATE	9/	15/90	 	vtonoi	n Droiod			STATION	<u>60+14 "P"</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Projec	л		OFFSET	<u>11.73 LI</u>	
	24			LC	OCATION		asnoe (Jounty, Nev	ada				ENGINEER	Ackor	
	2MM	C A		B	ORING	06	60+25						EQUIPMENT	Peterson	
	Ą			E.	A. #	00	079-01-5)		GROU					
	2c	~		G	ROUND EL	EV16	624.70 (m)		9/15/98	NE		METHOD	Auger / HO	2 Core
				H	AMMER DR	OP SYS	STEMR	lope - Cathe	ead				BACKFILLED	_YesD	ATE9/14/1998
	ELEV.	DEPTH	SAI	MPLE	BLOW C	OUNT	Percent		USCS		МАТ				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group						
		-													
		-													
		- 10.67			18				SM		Occasion	al cobbles.			
	1613.70 -	-11,13	F	SPT	20	46									
		-			20				-						
		-													
		-													
	1612 70 -	-12													
		12.19			11				_						
		_	G	SPT	37	50/102		w, PI, Sv							
		_ 12.65	н		50/102				-						
	1611 70	- 12													
	1011.70														
		_													
		-													
		-													
	1610.70 -	14													
		_													
		-													
		-													
	1609.70 -	- 15													
		_													
		_													
		-													
	1608.70 -	- 16													
		[
		-													
		-									Thin, med	lium dense	Silty Sand lense	es with few	
	1607.70 -	-17									decompos	sed granitic	boulders.		
		_													
11/01		-													
DT 5/	1606.70 -	- 18													
JT.GL		Ľ								18 44					
V_DC		[.0.77	Moist, der	nse, rust bro	own Silty Sand	with	
۲ ۲		-									estimated medium s	20% non-p and.	plastic fines, 80%	% fine to	
5D.GF	1605.70 -	- 19							SM						
79015		-													
T 00		[19.51	Moist ver	v dense br	own grev Silty (Gravelly	
DO_/		_									Sand with	estimated	15-20% non-pla	astic fines,	
ź							1								

				-		a/	14/98			EXPL	ORATIO	N LOG			
				S		<u> </u>	15/98							00.44 """	SHEET 3 OF 3
				El		<u> </u>	10/90 _520		vtenci	n Proio	~t		STATION	60+14 "P"	
				JC	DB DESCRI	PTION	ashoo (/ada				OFFSET	 MG	
	An .			LC	JCATION	 	0+25	2001 ILY, 1101						Acker	
	Mr.M			B(ORING	0	0+20 70-01-4	5		GROU				Peterson	
	1			E.	A. #	16	24 70 (, m)		DATE	DEPTH m	ELEV. m	DRILLING	Auger / H	
				G	ROUND EL	EV. <u></u> C	24.70 (nn 2009 - Cath		9/15/98	NE		METHOD		
				H	AMMER DR	OP SYS	STEM		eau				BACKFILLED	D	ATE
	ELEV. (m)	DEPTH	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	()				Increments	500 mm	Recova				40-65% fi	ne to coars	e sand, 20-40%	gravel.	
		-									Hignly val	riable with c	CODDIES.		
		-													
	4000 70	-													
	1603.70 -	-21													
		-													
		-													
		-													
	1602.70 -	-22													
		_													
		-													
		-													
	1601.70 -	-23													
		_													
		-							SM						
		-													
	1600.70 -	-24													
		-									Silty Sono	longog			
		-									Silly Sand	i lenses.			
		-													
	1599.70 -	-25													
		-													
		-													
		-													
	1598.70 -	-26													
		-													
		-									Silty Grav	elly Sand n	natrix with abun	dant	
	4507	-									decompos	sed boulder	'S.		
	1597.70 -	-27													
11		27.58								27.58					
5/11/0		+													
DT {	1596.70 -	28													
OT.G		Ļ													
		F													
J L JE		-													
15D.G	1595.70 -	-29													
07901															
DT 0(-													
		+													
z		L	1	1	L	I	L	I	1	1					

								/۵	15/08			EXPLORATION LOG	
						ST	ART DATE	<u> </u>	16/00				SHEET 1 OF 1
						ΕN	ND DATE	9/	10/90		vtonoi	STATION 61+49 "P"	
		/				JC	B DESCRI	PTION	1-580		xtensio	OFFSET 7.24 LT	
	54					LC	OCATION		ashoe	County, Nev	ada	ENGINEER	
	2Wr		6			BC	ORING	06	1+50			EQUIPMENT Acker	
	Å					E./	A. #	00	79-01-	5		GROUNDWATER LEVEL OPERATOR TELESON	
	, in the second s					GF	ROUND EL	EV16	21.21 (m)		9/16/98 NF METHOD Auger	
						HA	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead	BACKFILLED Yes DA	TE9/16/1998
	ELEV.	[DEPTH	I NC	AMPI). TY	LE /PE	BLOW C 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
	(-	0.0	0 1 <i>A</i>	s	PT	4 18 42	60	Ttecov u	w, PI, Sv	60	Slightly moist to moist, very dense, brown Clayey Gravelly Sand with estimated 20-30% low plastic fines, 60-70% fine to coarse sand.	
		-									50	0-20% gravel.	
		-										0.91	
	1620.21	+	1									Moist, dense to very dense, grey brown Silty	
		-										non-plastic to slightly plastic fines, 0-80% fine to	
		-	1.5	2 8 1 F	3 5	PT	50/0	50/0			-	coarse sand, 10-20% gravel. Abundant cobbles	Refusal with
		-					00/0				1	decomposed granite.	auger on
	1619.21	+	2										boulder - switch to rotary mud -
		-											met refusal -
		-											switch to core.
		F											
	1618 21	Ĺ	3 3.0	5									
	1010.21	_	5				36			51.0			
		-	3.5	10 1	; S	PI	40 49	89		w, PI, Sv			
		-									SM		
		-											
	1617.21	+	4										
		_											
		-											
	1616.21	+	5										
		-											
		-											
		-											
	1015 01	-	c	~								0.40	
	1615.21	E	6 6.1	0								6.10	
		_											
		-											
	1614.21	+	7										
		-											
		-											
/01		-											
5/11	1612.01	Ĺ	0										
3DT	13.21	T	o										
OT.G		F											
D_ ≥		F											
Z		-											
SD.GF	1612.21	+	9										
9015		F											
007		F											
DOT		F											
N													

							2/	24/00			EXPLO	ORATIO	N LOG			
					SI	ART DATE	<u> </u>	24/00								SHEET 1 OF 1
)		E١	ND DATE	3/.	24/00	 	vto!	n Drais -	.4		STATION	62+01 "P"	
					JC	B DESCRI	PTION	1-580	Freeway E	xtensi	on Projec	1		OFFSET	0.26 RT	
					LC	OCATION		asnoe (Jounty, Ne	ada				ENGINEER		
	2MM		9		BC	DRING	_06	52+00			[EQUIPMENT	 Tim	
	Å.	K	57		Ε.	A. #	00)79-01-5	5		GROU	NDWATER				
	ž.				GI	ROUND EL	_{EV.} _16	619.82 (m)		DATE 3/24/00		ELEV. m	METHOD	Trackhoe	
				1	HA	AMMER DR	OP SYS		IA		0, 2 - 1, 00			BACKFILLED	_Yes DA	TE3/24/2000
				SAI	MPLE	BLOW C	DUNT	_		11000						
	elev. (m)	DEI (r	n)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MATE	ERIAL DE	SCRIPTION		REMARKS
		_										Slightly m	oist, dense	brown, Well G	raded	
		-										9% low pla	astic fines,	53% fine to coa	rse sand,	
		-								sw		38% fine t	to coarse gi	avel with appro	ximately	
		-	0.91							SC		1070 31101	10000103.			
	1618.82 -	<u>+</u> 1	1.22	А	GRAB				MC, SA, PI							
										1	4.50					
		Ļ									1.52	Slightly m	oist, verv d	ense, brown. W	ell graded	
		-	1.83							-		Sand with	Silt and G	ravel with appro	oximately	
	1617.82 -	-2	2.13	В	GRAB				MC, SA, PI	sw		9% non-pl 22% fine t	iastic fines, to coarse di	og% tine to coa avel with appro	arse sand, ximately	
		-								SM		15% smal	l cobbles.		,	
		Ľ														
											2.74	Slightly	oict vorv d	onco brown Si	ty Sand	
	1616.82 -	-3										with Grav	el with app	roximately 15%		
		-										non-plasti	c fines, 67%	6 fine to coarse	sand, 18%	
		-								SM		small cobl	bles.		ely 1370	
		-	3.66	-						-						
	1615.82 -		3.96	С	GRAB				MC, SA, PI		3.96					
	1013.02	-														
		-														
		-														
		-														
	1614.82 -	-5														
		[
		Ļ														
		_														
	1613.82 -	-6														
		F														
		F														
		[
	1612.82 -	-7														
	-	F														
		F														
01		F														
5/11/	4044.00	-														
DT	1611.82 -	8														
OT.G		L														
D_V		F														
N Ld		-														
5D.G	1610.82 -	-9														
⁷ 9015		-														
001		t														
DOD		[
N																

					-		Q/·	12/90			EXPLO	ORATIO	N LOG			
					S		O/	12/33							400	SHEET 1 OF 1
					El	ND DATE	0/	12/33	Erooway F	vtonci	on Broice	~+		STATION	162+97 "	P1A"
					JC	DB DESCRI	PTION	1-000		xtensi	on Projec	л		OFFSET	16.85 LT	
	- me	.			LC	OCATION			Jounty, Ne	vaua				ENGINEER	 Ackor	
	2 Mart				BO	ORING	06	2+90]	EQUIPMENT	Peterson	
	- A				E.	A. #	00	079-01-	D		GROU					
	Ĭ.	Л			G	ROUND EL	EV16	616.25 (m)		8/12/99	NE	ELEV.III	METHOD	HQ Core	
			<i>N</i>		H	AMMER DF	ROP SYS	STEMF	Rope - Cath	ead				BACKFILLED	_Yesı	DATE 8/16/1999
	ELEV.	DEPT	нЬ	SAN	ЛРLE	BLOW C	OUNT	Percent		USCS		MATI				DEMARKS
	(m)	(m)		NO.	TYPE	Increments	300 mm	Recov'd		Group	_				0	REWARRS
		0.	00	А					W, PI, SV	sc		Gravelly S	se to very Sand with e	dense, red brow estimated 35% m	n Clayey iedium	
		-									0.46	plastic fine	es, 50% fin	e to coarse sand	d, 15%	-
		-										Moist, ver	y dense, bi	rown Clayey Gra	velly	
	1615.25 -	- 0. - 1	91	в					w, PI, Sv	-		Sand with	estimated	15% medium pl arse sand 30%	astic gravel	
	1010.20	- '										11103, 007			gravei.	
		- 1.	52							SM						
		-		<u> </u>	ерт	25	64									
	1614.05	1.	98	C	351	36	04									
	1014.25 -	- 2	29								2 29					
		-		_		24					2.20	Moist, ver	y dense, bi	rown Silty Grave	lly Sand	-
		- 2.	74	D	SPT	47 50/127	50/127					with estim	hated 20% t h fine to me	fines, 50% sand, edium cobbles, F	, 30% Poor	
		-										recovery -	gradation	difficult to estimation	ate.	
	1613.25 -	-3														
		Ľ														
		-														
		- 3.	96													
	1612.25 -	-4		_	0.DT	25				-						
		4.	42	E	SPI	40										
		_								SW						
		-														
	1611.25 -	-5 5.	18													
		-		-	ODT	50/407	50/407									
		_ 5.	64	F	571	50/127	50/127									
		-														
	1610.25 -	-6														
		-														
		Ľ														
		_														
	1609.25 -	7 7.	01			7					7.01	Moist mo	dium dono	e to dense arou	Clavey	4
		F		G	SPT	12	23		w, PI, Sv			Sand with	estimated	35% medium pl	astic	
		- 7.	47			11				-		fines, 55%	6 fine to co ed with Silt	arse sand, 10% v Sand, Sandy S	fine gravel. Silt and	
1/01		E										Sandy Cla	ay.	, Sana, Canay C		
- 5/1	1608.25 -	-8								SC						
-GD1		-														
DOT		- 8.	53													
Ž		Ľ		н	SPT	8 13	34									
GPJ	1607.25 -	9 8.	99			21					8.99					
115D		Ļ														
0079		F														
TOC		F														
N																

ſ					0740-	D 4	_ q/	16/98			EXPLO	ORATIO	N LOG			
					START	DATE	= <u>-3/</u> 9/	16/98							460.07 "	SHEET 1 OF 1
					END DA	ATE		10/30) Freeway F	vtonci	on Proiec	` †		STATION	162+97	-1A"
					JOB DE	SCR				vodo		,		OFFSET	NG	
	- Sam				LOCAT	ION		2.00	County, Nev	Vaua				ENGINEER	Acker	
	1 Mar				BORIN	G	0		r						Peterson	
	The second se				E.A. #			079-01-	5					DRILLING		
	te				GROUN	ID EL	EV16	616.25 ((m)	<u> </u>	9/16/98	NE		METHOD	HQ Core	/ SS Sampling
					HAMME	R DF	ROP SYS	STEM	Rope - Cath	ead				BACKFILLED	_YesD	ATE 9/16/1998
	ELEV. (m)	DEPTH (m)	I S. NC	AMPL). TY	<u>E BL</u> PE 150	OW C mm ments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		0.0 - 0.4	0 1 6	s s	PT 1 26/	0 0 102	26/102		w, PI, Sv	SM	0.43	Moist, der Sand with slightly pla	nse, grey to estimated astic fines.	brown Silty Gr 10-20% non-pla 60-70% fine to e	avelly astic to coarse	Core drilling with split spoon sampling.
		_								СН	0.70	sand, 10-2	20% gravel	Cobbles and b	oulders	
		-									0.79	Partially c	emented hi	gh plastic Sand	ly Clay.	-
	1615.25 -	-1										Moist, ver	y dense, ce 20% non-r	emented Silty S	and with	
												80% fine t	to medium	sand. Minor gra	vel.	
		- 1.5	2		ь <u>т</u> 1	0	50/407		DI O	SM		Gradation	and PI diff	icult to estimate).	
		1.8	3 15		50/	127	50/127		w, PI, Sv	_						
	1614.25 -	-2									2.13					
		-										Hard volca	anics and d	ecomposed gra	anitic V Sand	
		Ľ										matrix.			y Ganu	
		-														
	1613.25 -	-3														
		-														
		- 3.5	¹ C								3.51	Maiat ma	dium danaa	hrown arou to	brown	-
		Ľ										Silty Sance	aium aense I with estim	ated 10-20% no	on-plastic	
	1612.25 -	-4								SM		to slightly	plastic fine	s, 80-90% fine	to coarse	
		-								- OW		Sanu. Iviin	or graveny	lenses and lew	CODDIES.	
		4.5	7 _								4.57					
		-	D													
	1611 25 -	-5														
	1011.20	-														
		-														
		-														
		-														
	1610.25 -	-6														
		_														
		-														
		-														
	1609.25 -	-7														
		Ľ														
11/01		-														
T 5/·	1608.25 -	-8														
T.GD		-														
D		-														
2 ∩		E														
O.GP,	1607.25 -	-9														
3 015[F														
3700		-														
БОТ		-														
N																

				-		Q/	12/90			EXPLORATION LOG	_
				S		= <u>-0/</u> 	12/99			SHEET 1 O	F 2
				EI			1_580	Freeway F	vtensi	sion Project STATION 63+62 "P1"	
				JC	OB DESCRI		2500		vada	OFFSET OFFSET MG	
	- An			LC	OCATION	06	2160	Sounty, Nev	aua		
	W.W.W			B	ORING						
	1 miles			E.	.A. #		05 00 () m)			
	h			G	ROUND EL	EV10	005.98 ((III) Dana Cath		B/12/99 NE METHOD HQ Core	
			N	H.	AMMER DF	ROP SYS	STEM	kope - Cath	ead	BACKFILLED Yes DATE 8/16/199	19
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	S MATERIAL DESCRIPTION REMARKS	
	1604.98 -	- - - - - 1							SC	Moist, dense to very dense, brown Clayey Gravelly Sand with 15% medium plastic fines, 50% fine to coarse sand, 35% fine to coarse gravel.	
		- 1.52									
	1002.08	1.98	A	SPT	31 50/127	50/127		w, PI, Sv			
	1603.96 -										
		_ 2.44								2.44	
	1000.00	- 2.90	В	SPT	25 37 50/76	50/76		w, PI, Sv	_	Moist, hard, grey, extremely variable Sandy Clay, Clayey Sand, and Silty Sand with variable amounts of gravel.	
	1602.98 -	-3							SC	:	
	1601.98 -	- - - - 3.96			10					3.96 Moist_dense_orange tan Clavey Sand with	
		-	С	SPT	22	41				10% medium plastic fines, 90% fine to coarse	
		4.42		-	19				-	sand. Minor gravel.	
								W, FI, SV			
	1600.98 -	-5							sc		
		-									
		- 5.49			5				-		
			Е	SPT	8	19					
	1599.98 -	5.94 			11				-	6.10	
		- - - - 7.01								Moist, very stiff, grey Sandy Clay with 80-90% medium and high plastic fines, 10-20% very fine sand. Interbedded silty sand. Soil grades between high and medium plastic clay.	
	1598.98 -	7 7.01	-		8				1		
		- 7.47	F	SPT	7 16	23					
Σ		-							1		
T.GDT 5/11/0	1597.98 -								СН	н — — — — — — — — — — — — — — — — — — —	
_DO		8.53			A				4		
JPJ N			G	SPT	8 18	26		w, PI, Sv			
15D.G	1596.98 -	-9 0.33							1		
07901											
DT 0		0.75									
D		- 3.13			8				1		
z		1	1	1	1	1	1	1	1		

						Q/	12/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	12/99						SHEET 2 OF 2
				EI	ND DATE	8/	12/99	 		n Drainat	STATION	63+62 "P1"	
				JC	OB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	<u>3.51 LI</u>	
	Lat			LC	OCATION	VV	ashoe (County, Nev	/ada		ENGINEER	Advan	
	W			B	ORING	06	3+60]	EQUIPMENT	 Deterson	
	Z.			E.	.A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Feleison	
	and the			G	ROUND EL	EV. 16	605.98 (m)		DATE DEPTH m ELEV. m	METHOD	HQ Core	
		<i>\</i>	6	H.	AMMER DF	ROP SYS	STEM R	Rope - Cath	ead		BACKFILLED	Yes DA	TE 8/16/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION		REMARKS
		10.21	н	501	12	26			-	^{10.06} Single completely we	athered Graniti	c Boulder.	
		-											
		-											
	150/ 08	1											
	1394.90												
		-								11.43			
		11.58			15				-	Moist, dense to very Silty Sand with estim	dense, brown to ated 20% non-r	o grey	
		-	Т	SPT	37	50/127				fines, 80% fine to me	dium sand.		
	1593.98	<u>12^{12.04}</u>			50/127				-				
		_							SM				
		-											
	1592.98	13 13.11											
		-	J	SPT	21	56							
		13.56	Ŭ.		32					13.56			
	1591.98	- 14											
		-											
		-											
		-											
	1590 98	- 15											
	1000.00	-											
		-											
		-											
		-											
	1589.98	-16											
		_											
		-											
	1588.98	- 17											
		-											
1/01		_											
Γ 5/1	1587.98	- 18											
T.GD		F											
DOD		-											
N		Ĺ											
GPJ	1586 98	<u>19</u>											
015D	1000.00												
1670C		-											
0T		F											

						_ 10)/26/99			EXPLO	ORATIO	N LOG			_	
				S		= <u>-10</u> 10)/26/99							104-40	S S	HEET 1 OF 1
				EI			1_5QA		vtenci	on Projec	` †		STATION	164+18	"P1A" T	
				JC	DB DESCRI	PTION			1001010		, L		OFFSET	 MG	1	
				LC	OCATION		asilue (aud				ENGINEER	Acker		
	ž, v	5		B	ORING	06	04+1U	_		0-0-0				Peterso	n	
	4			E.	.A. #	0	0/9-01-	D					DRILLING		-	
	in the second se			G	ROUND EL	EV16	605.65 (m)		10/26/99	NE		METHOD	HQ Cor	е	
		\mathbf{v}	1	H.	AMMER DR	OP SYS	STEM	Rope - Cath	ead				BACKFILLED	Yes	DATE	10/26/1999
ELE ^V	V. DE	PTH m)	SA NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MATI	ERIAL DE	ESCRIPTION			REMARKS
()		0.00	Α		Increments		Recoviu	w, PI, Sv			Moist, ver	y dense, br	own to dark bro	wn		
									60		medium p	lastic fines	d with estimated	arse sand.		
	-								30		25% grav	el. Few sma	all cobbles.	,		
	-									0.91						
1604.6	65 + 1										Moist, der	nse, brown	Clayey Sand wi	th		
	F										fine to coa	arse sand.	asuc plastic fin	5, 00%		
	-	1.52	-		22				-							
	F		В	SPT	26	57		w, PI, Sv	SC							
1603.6	65 2	1.98			31											
	F															
	F															
		2.74								2.74	Oliver				_	
1602 6	s5 − 3		С	SPT	12	26		w, PI, Sv			Clavev Sa	oist, mediu and with est	m dense, light b timated 45% me	orown edium		
1002.0		3.20			14				_		plastic fine	es, 55% fin	e to coarse san	d.		
	-								60		Interbedde	ed Slity Sal	nd and Sandy S	lit.		
	-								30							
	-															
1601.6	55 -4	4 27								1 27						
	-	7.21			15					4.27	Slightly m	oist, hard, l	orown Sandy Cl	ay with		
	-	4 72	D	SPT	25 26	51					estimated	90% high	plastic fines, 10	% fine tv Sand		
	-				20				1		Sanu. Inte			ty Sanu.		
1600.6	65 + 5															
	Ę															
	Ĺ															
	-	5.79			12				-							
1599.6	65 +6		Е	SPT	14	31		w, PI, Sv								
		6.25			17				-							
	F								СН							
	Ľ															
1598.6	55 ∔7															
	F	7.32														
	-		F	ent	12	24]							
/01	-	7.77		371	19	34										
1507 0	35 Lo															
	~ [-0															
ť	F															
N N	F	_														
LdE	-	8.84			12					8.84	Slightly m	oist, verv d	ense, brown are	v Poorly	_	
1596.6	65 † 9	0.00	G	SPT	30	57			0.5		Graded S	and with es	stimated 5% nor	n-plastic		
.0620	-	9.30			27				SP		fines, 95%	6 fine sand.				
DT O	F									9.60					_	
	\vdash															
ż				I												

						. a/·	14/98						
				ST	ART DATE	<u> </u>	1//02					101.05	SHEET 1 OF 1
				E١	ND DATE	- 3/	14/30	Ereowov 5	vtonoi	n Project	STATION	164+35	'P1A"
				JC	B DESCRI	PTION	000-1		xtensic		OFFSET	<u> </u>	
	.04			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER		
	2MM	6		BC	ORING	06	64+50				EQUIPMENT	Peterson	<u> </u>
	4			Ε.	A. #	00	079-01-5	5		GROUNDWATER LEVEL	OPERATOR	1 6(6130)	I
	n n n n n n n n n n n n n n n n n n n			GI	ROUND EL	_{EV.} _16	602.37 (m)		DATE DEPTH m ELEV. m	METHOD	HQ Core	•
			1	HA	AMMER DR	OP SYS	STEM_R	ope - Cathe	ead		BACKFILLED	Yes	DATE9/14/1998
ŀ	ELEV/	DEPTH	SA	MPLE	BLOW CO		Demont		LISCS				DEMARKO
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LABTESTS	Group				REMARKS
	1601 27	0.00							CL	Moist, very stiff, reddi with estimated 50-609 40-50% very fine to fin lenses present.	sh brown Sana % medium plasi ne sand. Coarsi	y Clay tic fines, er sand	
	1001.37 -	1.22						w, PI, Sv,		Moist, hard, light gree	n grey Sandy C	clay with	-
	1600.37 -		B					Sh	_	estimated 80-90% hig very fine sand. Interbe Silty Sand lenses.	h plastic fines, edded Sandy Si	10-20% ilt and thin	
	4500.07	-											
	1599.37	- 3 - - 3.66	c					w, PI, Sv	СН				
	1598.37 -	3.96 4 	A					w, Pl, Sv	_				
	1597.37 -	5 5.18	E					w, Pl, Sv		5.03 Moist, stiff, light greer estimated 50-60% me 40-50% very fine to fin and sandy lenses.	n grey Sandy Cl edium to high pl ne sand. Minor	lay with astic fines, gravelly	-
	1596.37 -	- - -							CL	6.71			
	1595.37 -	- - -							SP	Moist, dense, brown C estimated 5% non-pla coarse sand, 40% gra 7.47	avel to 2cm.	fine to	
OT.GDT 5/11/01	1594.37 -	- - - - -							ML	estimated 70% non-p sand. 8.08	Sandy Slit With lastic fines, 30%	% very fine	_
V_DOT 0079015D.GPJ NV_D	1593.37 -	- - - - - -											

				~		. 8/	19/99			EXPLORATION LOG			
				51		: <u>-0/</u> 8/	19/99						SHEET 1 OF 1
				E٢	ND DATE		1-580	Freeway F	vtonci	n Project	STATION	165+36 P1	A [*]
				JC	B DESCRI	PTION					OFFSET	40.10 L1	
	- Arr			LC	OCATION				aua		ENGINEER	Komatsu F(
	2 Mr.			BC	DRING	0	05+30 (L	- -				Dan	
	4			Ε.	A. #		079-01-	, ,		GROUNDWATER LEVEL			
	Ž.			GI	ROUND EL	EV15	699.23 (m)		8/19/99 NE	METHOD	Irackhoe	
				HA	AMMER DR	OP SYS	STEM	IA			BACKFILLED	_YesDAT	E 8/19/1999
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
					Indioinidinid		110001 0			Dry, dense, brown Cla	ayey Sand with	36% high	
		- 0.30	5						sc	Grades gently into un	% fine to coars derlving unit. T	e sand. opsoil.	
		0.61	JA	GRAD				F1, 3V	_	0.76	, ,	•	
		-	5B	GRAB				PL Sv	GW	Dry, dense, light brow	m Well-Graded	Gravel	
	1598.23 -	<u>1 1.04</u>						11,00	011	1.04 with Sand, with 2% lo	w plasticity fine	es, 30%	
		-								subrounded gravel.	nd 68% fine to Contains highly	to	
		-								moderately weathered	d andesite and	granite with	
										1.83 Drv. dense. vellow-bro	3. own to arev An a	desite.	
	1597.23 -	-2								Moderately to highly f	ractured and sli	ghtly to	
		_								subangular excavated	d with angular to I fragments.	D	
		_								Difficult excavation wi	th practical refu	isal at	
		-								1.82m.			
		-											
	1596.23 -	-3											
		_											
		_											
	1595.23 -	-4											
		-											
		-											
		-											
	1504 22												
	1094.23												
		_											
		_											
		-											
	1593.23 -	-6											
		-											
		-											
		_											
	1592.23 -	-7											
		-											
		-											
Ξ		-											
7/11/C		-											
DT 5	1591.23 -	-8											
DT.GI		Ľ											
/_DC		Ĺ											
Х		-											
O.GP.	1590.23 -	-9											
015L	-	-											
0079		-											
D		F											
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~ I													

ſ						Q/	11/00			EXPLORATION L	LOG			
				ST	FART DATE	<u> </u>	11/00							SHEET 1 OF 1
				E١	ND DATE	8/	11/00	Eroowov F	vtonci	on Project		STATION	65+36 "P1"	
				JC	DB DESCRI	PTION	1-500		xiensi vodo			OFFSET	89.46 K I	
	Sm			LC	DCATION				aua			ENGINEER	1D 2001 C	
	S.W.W			BC	DRING	0		//QD-3) -					-	
	4			Ε.	A. #		079-01-0 00 00 () 			EVEL	DRILLING	Turalitar	
	2ª			GI	ROUND EL	EV15	80.28 (m)		8/11/00 NE		METHOD		
				HA	AMMER DR	OP SYS	STEM	IA				BACKFILLED	Yes DA	TE 8/11/2000
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATER	RIAL DE	SCRIPTION		REMARKS
		0.30								Dry, loose to Clavey Sand	medium with 289	dense, dark bro 6 medium plast	own	
		0.61	2A	GRAB				PI, Sv	SC	fines, 70% fin	ne to coa	rse sand, and 2	% fine	
		0.01							_	0.76	imass to	0.3m.		
	1579.28 -	- 1								Dry to moist, Sand with 32	dense to % high p	very dense, ta	n Clayey	
	1010.20	1.22							-	to coarse san	nd, and 6	% fine gravel.	Unit	
		1.52	2B	GRAB				PI, Sv		contains mod 152mm diam	derately v neter to 2	veathered cobb 5% of unit. Mo	les to derate	
		-]	difficulty exca	avating.			
	1579.29													
	1370.20	2							sc					
		-												
		-												
	4577.00	-												
	1577.28 -	3												
		_												
		-								3.66				
		-												
	1576.28 -	4												
		-												
		-												
	1575.28 -	-5												
		_												
		-												
	1574.28 -	-6												
		-												
		_												
	1573.28 -	-7												
		-												
		_												
1/01		Ļ												
T 5/1	1572.28 -	-8												
T.GD		-												
G		-												
₹ N		-												
C.GP.	1571.28 -	-9												
115E		-												
9700		-												
Ъ		-												
		「												

							. q/	13/98			EXPL	ORATIO	N LOG			
					ST	ART DATE	<u> </u>	13/08							405 00 "5	SHEET 1 OF 1
					EN	ID DATE		15/30	Ereeway E	vtonsic	n Projec	~ t		STATION	165+99 "H	21A"
					JC	B DESCRI	PTION			vodo	in rojec	51		OFFSET	10.30 LT	
	Sa				LC	CATION			Journy, Nev	aua				ENGINEER	Acker	
	3 ANN				BC	DRING	0		-	[0001				Peterson	
	a de la compañía de la				E./	A. #		079-01-0)					DRILLING		
	2				GF	ROUND EL	EV. 15	<u>98.19 (</u>	m)		9/13/98	NE		METHOD	HQ Core	
			M		HA	MMER DR	OP SYS	STEM _ R	tope - Cathe	ead				BACKFILLED	Yes D	ATE 9/13/1998
	ELEV. (m)	DEPTH (m)	I N	SAN IO.	IPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		0.0	00	A					w, PI, Sv			Highly to fractured.	moderately brown arev	weathered, mod Volcaniclastic	derately	
		-										Conglom	erate. Easi	ly crumbles to s	ilty sand.	
		0.0		B					Sh	-						
	1597 19	1														
	1007.10	-														
		- 1.5	2													
		-							w, PI, SV							
	1506 10	-														
	1390.19															
		_														
		-														
		-									3.02					
	1595.19	3									0.02					
		_														
		-														
		-														
	1594.19	-4														
		_														
		-														
	1593.19	-5														
		_														
		_														
	1592.19	-6														
		-														
		_														
	1591.19	- 7														
		-														
1/01																
Γ 5/1	1590.19	-8														
-GD		-														
		-														
Ň																
.GPu	1589.19	- 9														
)015E		-														
0079		-														
TOC		-														
		-														

						Q/*	13/08			EXPLORATION LOG			
				ST	FART DATE	<u> </u>	12/00						SHEET 1 OF 2
				E١	ND DATE	9/	13/98				STATION	167+61 "F	P1A"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Project	OFFSET	37.07 LT	
				LC	OCATION	W	ashoe (County, Nev	vada		ENGINEER	SDB	
	MA	U L		BC	ORING	06	7+50				EQUIPMENT	Acker	
	- A			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	1 de			GI	ROUND EL	_{EV.} 16	12.07 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				н		OP SYS	R	ope - Cathe	ead	9/13/98 NE		Yes D	ATE 9/13/1998
								•				D	
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm	Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	(,	0.00	Α		Incrementa	500 11111	TLECOV U	w, PI, Sv		Highly to moderately	weathered, high	nly	
										fractured, dark blue-g	ray to black An	desite	
		_								fragments. Matrix of	silty, clayey sar	nd -	
		_								variable material. An	desite gravel fra	agments.	
	1611.07 ·	+1								oncarca radit zone.			
		-											
		-											
		-											
	1610.07												
	1010.07	_											
		_											
		-											
		-											
	1609.07 ·	-3											
		-											
		-											
										Easily broken, crumb	les.		
	1608.07	-4											
		_											
		-											
		-											
		-											
	1607.07	-5											
		_											
		_											
	1606.07 ·	-6											
		F								Poor recovery.			
		F											
		Ľ											
	1605.07	⊥ 7											
	1000.07	Ļ.											
		F											
5		-											
/11/0		-								Poor recovery			
DT 5	1604.07	-8								i ooi iecovery.			
JT.GL		-											
20													
^Z ∩		_											
O.GP.	1603.07 ·	– 9											
)015L		-											
0079		-											
ŏ		F											
NV_L													

[0/	12/00			EXPLO	ORATIO	N LOG			
					ST	ART DAT	E	13/90								SHEET 2 OF 2
					EN	D DATE	9/	13/98						STATION	167+61 "F	'1A"
					JOE	B DESCR	IPTION	1-580	Freeway E	xtensic	on Projec	л		OFFSET	<u>37.07 LI</u>	
					LO	CATION		asnoe (County, Ne	ada				ENGINEER		
	2Wm	e s			BO	RING	0	57+50		[EQUIPMENT	Peterson	
	- A				E.A	. #	0)/9-01-	5		GROU					
	Ž.				GR	OUND EI	_EV16	512.07 ((m)		9/13/98	NE	ELEV. III	METHOD	HQ Core	
					HAI	MMER D	ROP SY	STEM _F	Rope - Cath	ead				BACKFILLED	Yes D	ATE 9/13/1998
	ELEV.	DEPTH	I S	AMPI	LE	BLOW C		Percent		USCS		МАТ				REMARKS
	(m)	(m)	NC). TY		Increments	300 mm	Recov'd		Group						
		-														
		-									10.67					
											10.07					
	1601.07	-11														
		-														
		_														
	1600.07	-12	0													
		- 12.1	B	+					w, PI, Sv	-						
	1599.07	-13														
		-														
		-														
	1598.07	-14														
		-														
		-														
	1597.07	-15														
		-														
		-														
	1596.07	-16														
		-														
		-														
	1595.07	-17														
		-														
		-														
1/01																
L 5/1	1594.07	-18														
[GD]		-														
DO		-														
Ň		Ľ														
O.GP,	1593.07	-19														
9015L		_														
0075		-														
DOT																
Ž																

							12/08			EXPLORATION LOG			
					START DAT	E/	13/02					400 00 "D (SHEET 1 OF 3
					END DATE		10/90		vtonci	n Project	STATION	168+98 "P1/	<i>A</i>
					JOB DESCR		1-000		vada		OFFSET		
	-20-				LOCATION		a51108 (Journy, inev	aua		ENGINEER	Acker	
	1 Mar				BORING	0	09+00	_				Peterson	
	1	\geq			E.A. #		079-01-	D		DATE DEPTH m ELEV m	DRILLING	110.0	
	2				GROUND EL	EV16	519.83 (m)		9/13/98 NE	METHOD	HQ Core	
					HAMMER D	ROP SYS	STEM	Rope - Cathe	ead		BACKFILLED	YesDAT	E 9/13/1998
	ELEV.	DEPTH	H S	AMPL	E BLOW C		Percent		USCS		SCRIPTION		REMARKS
	(m)	(m)	NC). TY	PE Increments	300 mm	Recov'd	W PL Sv	Group			Jwith	
		- 0.0						w, i i, ov		Sand.	Glayey Glave		
		-											
									GC				
	1618.83 -	-1											
		-								1 34			
		- 1.5	52 B							Moist, dense, grey-bro	wn, Silty Grav	el with	
		-	В					W, F1, 3V		Sand.			
	1617.83 -												
	1017.05 -	2											
		F											
		-											
		-							GM				
	1616.83 -	_3							Givi				
		-											
		-											
		-											
	1615.83 -	-4											
		Ľ											
		4.5	57 C	_				w, PI, Sv		4.57	fue et une el Vel		
		-								Mudflow. Contains vo	, fractured vol loanic gravel fi	agments.	
	1614.83 -	-5											
		-											
		Ľ											
		_											
	1613.83 -	6 6.1	0										
		-						w, r 1, 3v		Several motovolconio f	fragmente		
		F									nayments.		
		Ľ											
	1612.83 -	-7											
		-											
		-											
/01		-											
5/11	1611.83 -	- 8											
GDT	1071.00												
DOT.		-											
		-											
GPJ	1640.00	- -											
15D.	1010.83 -	9.1 -	4 E	_				w, PI, Sv	-				
06700		Ļ											
OT C		-								Multicolored volcanic g	gravels, typicall	у	
		-								Guin groy to black.			
2		I		- 1	I	1			1	I			

				-		. a/·	12/98			EXPLORATION LOG	
				ST	ART DATE	<u> </u>	13/02				SHEET 2 OF 3
				E١	ND DATE		10/00 _EQA		vtencio	STATION	168+98 "P1A"
				JC	B DESCRI	PTION			vodo	OFFSET	SUB
	24			LC	OCATION			Journy, Nev	aud	ENGINEER	Acker
	S. WWW			BC	DRING	0	70 01 4		[Peterson
	Ţ			E.,	A. #		40.02 ()		DATE DEPTH m ELEV m DRILLING	
	20			GI	ROUND ELI	EV16	019.83 (Г	m)		9/13/98 NE METHOD	
				HA	AMMER DR	OP SYS	STEM	tope - Cathe	ead	BACKFILLED	Tes DATE
	ELEV.	DEPTH	SAN	MPLE TYPE	BLOW CO	DUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
	1608.83 - 1607.83 - 1606.83 - 1605.83 - 1604.83 - 1603.83 -	- - - - - - - - - - - - - - - - - - -								13.72 13.72 Hard, slightly weathered, grey to dark g Andesite Bedrock. 14.78 Soft to slightly hard, highly weathered, fractured, tan to tan brown Volcanic Be 14.78 Soft to slightly hard, highly weathered, fractured, tan to tan brown Volcanic Be	edrock.
	1602.83 -									17.04	
		_									
11/01		-								17.83	
T 5/1	1601.83 -	- 18								Highly fractured, moderately weathered grey Andesite. Clayey sand fracture fil	I, hard, ling
T.GD		F									5
DO		Ĺ									
NN r		Ľ									
D.GP.	1600.83 -	- 19								Loss of drilling fluid return.	
3015		F								-	
9079		-									
TOC		F									
NV_L		[

						0/	12/02			EXPLORATION LOG		
				S	FART DATE	<u> </u>	12/90					SHEET 3 OF 3
				El	ND DATE	9/	13/98				STATION 168+98	= "P1A"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET 51.03 L	<u>.T</u>
	Lat			LC	OCATION	VV	ashoe (County, Nev	vada		ENGINEER SDB	
	1 MM			B	ORING	06	59+00		r		EQUIPMENT Acker	<u></u>
	Ĩ,			E.	A. #	00)79-01-5	5		GROUNDWATER LEVEL	OPERATOR	
	ž.			G	ROUND EL	EV16	619.83 (m)	F	9/13/98 NE	METHOD HQ Col	е
			1	H	AMMER DR	OP SYS	STEM_F	Rope - Cathe	ead		BACKFILLED Yes	DATE 9/13/1998
	ELEV.	DEPTH	SA	MPLE	BLOW C	OUNT	Percent		USCS		SCRIPTION	REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group			
		-										
		-										
	1598.83	-21										
		-										
		_										
	1597.83	-22										
		-								Low to moderate fract	turing.	
		-										
	1596.83	-23								Highly fractured cont	inued loss of drilling fluid	
		-								recovery.		
		_										
	1595.83	-24										
		-										
		_										
		_										
	1594.83	-25										
		-										
		_										
	1593.83	-26										
		-										
		_										
	1592.83	-27										
		-								27 42		
										27.43		
1/01		_										
T 5/1	1591.83	-28										
T GD		-										
.0D		L										
NN L		Ļ										
D.GP	1590.83	-29										
9015		-										
- 007		L										
DOT		Ĺ										
Ν												

						. 10	0/13/02			EXPLORATION LOG	
				ST	ART DATE	12	2/13/90				SHEET 1 OF 2
				E١	ND DATE	12	10/90	Eroowey F	vtona	STATIONSTATION	1A"
				JC	B DESCRI	PTION	1-580		xtensio	OFFSET 8.35 LT	
	54			LC	OCATION		asnoe (Jounty, Nev	ada	ENGINEER	
	2WM	2		BC	ORING		0+60				
	Ţ			Ε.	A. #	0	079-01-8	D		GROUNDWATER LEVEL OPERATOR	
	Ž.	~		GI	ROUND ELI	EV16	607.80 (<u>m)</u>		12/13/98 NE HQ Core	
				HA	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead	BACKFILLED Yes DA	TE <u>12/13/1998</u>
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		0.00 	A					w, PI, Sv		Moist, dense, brown Clayey Sand with estimated 30-40% medium plastic fines, 60-70% fine to coarse sand. Minor gravel and surface cobbles and boulders to 1 meter diameter.	
	1606.80	-1									
		- - 1.52 - 1.68 -	B C					w, PI, Sv w, PI, Sv	SC		
	1605.80	-2									
		-								Siltier lenses with up to 10% gravel and small cobbles.	
	1604.80	3 3.05	Đ						_		
		-								3.35	
	1603.80	- - 								Moist, dense to very dense, brown Silty Gravelly Sand with estimated 25-35% slight to low plastic fines, 55-75% fine to coarse sand, 5-10% gravel. Partially cemented soil nodules in zones.	
	1602.80	<u>4.57</u>	E						SM	Soft clayey zones with no recovery.	
	1601.80 -	- 	F					w, Pl, Sv	-		
	1600.80	7.01	G					w, PI, Sv, Sh		7.32 Soft to moderately bard, weathered, slightly	
VV_DOT.GDT 5/11/01	1599.80	8 - - -	- #-						_	fractured, grey to brown grey Volcaniclastic Conglomerate.	
NV_DOT 0079015D.GPJ N	1598.80	9 9.14 - - -	-1-						-		

						11	0/12/00			EXPLORATION LOG			
				S	TART DATE	12	2/13/90						SHEET 2 OF 2
				El	ND DATE	_12	2/13/98				STATION	170+56 "F	P1A"
				JC	OB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	8.35 LT	
				LC	OCATION	W	ashoe (County, Nev	/ada		ENGINEER	MG	
	M	E La		B	ORING	07	' 0+60				EQUIPMENT	Acker	
	Ĩ.			E.	.A. #	00)79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	n de la companya de la compa			G	ROUND EL	EV16	607.80 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
			4	н	AMMER DR	OP SYS		Rope - Cath	ead	12/13/96 INE	BACKFILLED	Yes	ATE 12/13/1998
			SA		BLOW C			1	1	1	-		
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm	Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
						000 1111	110001 0						
		_											
		- 10.67											
		-	Ŭ										
	1596.80	-11											
		-								11.37			
		11.58	ĸ					w, PI, Sv,		Moderately to slightly	hard, slightly to) Viably	
								Sh		fractured, grey Ande	a, fractured to r site Bedrock (A	ligniy Ita	
	1595.80	-12								Formation). Weather	ng increases w	ith depth.	
		-											
		-											
		-											
		-											
	1594.80	13 13.11	L						-				
		_											
		-											
	1593.80	- 14											
		-											
		- 14.63											
			M						1				
	1592.80												
		-											
		-											
		-								Orange high plastic of	lay in fractures.		
		-											
	1591.80	16.15	N						4				
		Ĺ											
										40.70			
		16.76	0							10.70			
	1590.80	-17											
		-											
		F											
1/01													
5/1	1589.80												
GDT		$\left \right ^{2}$											
DOT.		F											
		F											
ΓďΞ		-											
15D.C	1588.80	19											
17901													
T 00		Ļ											
DO		F											
Ž													

						10	0/12/02			EXPLORATION LOG			
				ST	ART DATE	12	0/1//00						SHEET 1 OF 2
				E١	ND DATE	_12	-/ 1-+/ 90		vtonci	on Project	STATION	1/1+96 "P	1A"
				JC	B DESCRI	PTION			vada		OFFSET	MG	
	2m			LC	DCATION		22±00		aud			Acker	
	× v			BC	DRING		2700	5				Peterson	
	1 miles			E.,	A. #	16	314 05 (5 m)		DATE DEPTH m ELEV. m	DRILLING		
	Ve			GI	ROUND EL	EV	514.05 (nn) 2009 - Cath		12/14/98 NE	METHOD		12/14/1008
				HA	AMMER DR	OP SYS	STEM				BACKFILLED	DA	TE
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.00	А					W, PI, SV		soft, highly to comple	etely weathered, site Bedrock (A	lta	
		-								Formation).			
										This also as a			
	1613.05	-1								i nin ciay seam.			
		-											
		- 1.52	В					w, PI, Sv	_				
		_						, , -					
	1612.05	-2											
		-											
		_ 2.44	С						-				
	1611.05	-3											
		3.35	6										
		_	-0-					W, PI, SV	-				
		3.81	F										
	1610.05	-4	-										
		- 4.27	F					w, PI, Sv	_				
		-								4.57			
										Moderately hard, mod highly fractured grey	derately weather to olive brown	red, Andesite	
	1609.05	-5								bedrock.			
		-											
		5.64	~										
		_	G						1				
	1608.05	6 6.10	н					W PL SV		Clay seam.			
		-						w, i i, ov					
		_											
	1607.05	+7 ₇₁₆											
		-	-						-				
										Void or very soft clay recovery.	zone to 7.9 me	ters - no	
1/01		_											
T 5/1	1606.05	-8											
T.GD		-											
DO_										Completelyment	d halaw 0 5	toro	
NN F		6.69	J						-	Completely weathere	u below 8.5 met	iers.	
D.GP	1605.05	-9											
9015		F											
r 007		9.60	ĸ										
DOT			ĸ										
Ň													

						. 12	/13/08			EXPLO	ORATIO	N LOG			
				S	FART DATE	12	/13/90								SHEET 2 OF 2
				El	ND DATE		14/90	Eroowov E	vtonoio	n Broiog	.+		STATION	171+96 "F	P1A"
				JC	DB DESCRI	PTION	1-000		xtensio	n Fiojec	,i		OFFSET		
	- Am			LC	DCATION			Journey, Nev	aua				ENGINEER		
	1 May	-		B	ORING		2+00	_	[0001				Peterson	
	The second se			E.	A. #		44.05.) 					DRILLING		
	2u			G	ROUND EL	EV10	14.05 (m) Nama Oathu		12/14/98	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM _	tope - Cathe					BACKFILLED	resD	ATE 12/14/1998
	ELEV.	DEPTH	SA NO.	MPLE TYPE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
	()	(11)			Increments	300 1111	Recova								
		_													
		-													
		_ 10.82	L						-		Clay fract	ure infilling	from intense we	eathering.	
	1603.05 -	-11													
		_													
		11.73													
		-	IVI												
	1602.05 -	12	N							12.19					
		-													
		-													
	1001.05	- 10													
	1601.05 -	- 13													
		-													
		-													
	1600.05 -	- 14													
	1000.00	-													
		-													
		-													
	1599.05 -	-15													
		-													
		-													
	1598.05 -	-16													
		-													
		-													
	1597.05 -	-17													
		-													
		-													
1/01		_													
- 5/1	1596.05 -														
LGD.		-													
DO		-													
N N		Ľ													
D.GP.	1595.05 -	- 19													
9015		+													
r 007		Ľ													
БО		Ļ													
Σ															

				-		. 12	2/14/98			EXPLORATION LOG			
				S	TART DATE	12	2/16/08						SHEET 1 OF 3
				EI	ND DATE		1 5 90	 Eroowov E	vtonoi	an Braiant	STATION	73+80 "P1"	
				JC	OB DESCRI	PTION	1-000		xtensi		OFFSET	4.39 L I	
	- Ann			LC	OCATION		20.70	Journy, Nev	aua		ENGINEER	Acker	
	SWW N			B	ORING		3+70	_				Peterson	
	4 m			E.	.A. #		079-01-3	D		DATE DEPTH m ELEV m	DRILLING		
	20			G	ROUND EL	EV15	082.67 (<u>m)</u>		12/16/98 NE	METHOD	HQ Core	
				H.	AMMER DR	OP SYS	STEM	kope - Cathe	ead		BACKFILLED	_YesDA	TE <u>12/16/1998</u>
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m) 0.0			Increments	300 mm	Recov'd	w, PI, Sv		Sandy Gravelly Clay	old roadway fill.		
		-							CL				
		-											
	1581.67	+1								1.07 Soft_completely to bid	nhlv weathered		
										shattered, dark grey t	o brown, undiffe	erentiated	
		- 1.6	² B					w, PI, Sv, Sh	-	Metasedimentary Beo	drock.		
		-						w, PI, Sv					
	1580.67	-2											
		-											
		-											
	1579.67	<u>-3</u> 3.0	5 D					w, PI, Sv	-				
		- 3.6	³ E										
		-											
	1578.67	-4											
		4.4	2 _										
		_	F					w, Pi, Sv					
		-											
	1577.67	-5 5.03	G						-				
		5.7	9 н					w, PI, Sv	-				
	1576.67	-6								Dedreek is slightly he		h.	
										fractured.	rd and extreme	ly	
		_ 6.6	4										
		-											
	1575.67	+7											
		E											
÷		7.7	1 .					w. Pl. Sv.					
/11/0			J					Sh	1				
DT 5,	1574.67	-8											
DT.GI		Ľ											
		-											
N		F											
5D.G	1573.67	+9	1										
7901		9.24	T	-	9				-				
JT 0C		9.6	9 K	SPT	35 50/76	50/76							
V_DC		-		1					1				
z		1		1			1						

[- 12	9/14/98			EXPL	ORATIO	N LOG			
				S	TART DATE	12	/1 - /30							TO OO "D	SHEET 2 OF 3
				El	ND DATE		1 5 90		vtonoir	n Droio	~ +		STATION	73+80 "P"	"
				JC	DB DESCRI	PTION	1-000			n Fioje	<i>.</i>		OFFSET	4.39 L I	
	2m	.		LC	DCATION			Journy, Nev	aua				ENGINEER	Acker	
	1 Mary			B	ORING		3+70	-		0001				Peterson	
	The second	\geq		E.	A. #		079-01-5)					DRILLING	110.0	
	20			G	ROUND EL	EV15	82.67 (m)		12/16/98	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead				BACKFILLED	res D	ATE 12/16/1998
Ī	ELEV.	DEPTH	SAI NO		BLOW C	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)			Increments	300 mm	Recov'd		Cicup						
		- 10.27	L												
		- 10.73													
		-	M						-		Possible :	shear zone	to 13.7 meters.		Poor to no
	1571.67 -	-11 11.16	N												extremely
			IN												difficult drilling conditions.
		_													
		- 11.89													
	1570.67 -	-12	U												
		12.37	Р												
		_	•												
		-													
	1569.67 -	-13													
		13.41													
		_	0	SPT	16 26	66									
		- 13.87	R		40				-						
	1568.67 -		0												
		_	3												
		_													
		14.94													
	1567.67 -		Т	SPT	50/102	50/102			1						
		_													Lost hole due to
		_													caving - auger down and
		-													continued
	1566.67 -	- 16													coring.
		- 16.46													
		16.61	U	SPT	50/76	50/76			-						
		-													
	1565.67 -	-17													
-		_ 17.65	V												
/11/0		-	v												
DT 5.	1564.67 -	-18													
DT.GI											Slight alte	eration in zo	nes.		
D_ □		-									5g. n and				
N N		- 18.87	w						-						
5D.G	1563.67 -	- 19													
7901															
7 00		-													
		-													
z		1		1	1	1		1	1	1					
						10	/1/08			EXPLO	ORATIO	N LOG			
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				ST	FART DATE	12	/14/90								SHEET 3 OF 3
				E١	ND DATE	_12	/16/98			Б.			STATION	73+80 "P	1"
				JC	DB DESCRI	PTION	1-580	Freeway E		n Projec	τ		OFFSET	4.39 L1	
	-she			LC	OCATION		ashoe (County, Nev	ada				ENGINEER	 Ackor	
	2MM			BC	ORING	07	3+70]	EQUIPMENT	Peterson	
	- Z			Ε.	A. #	00	79-01-5)		GROU				1 01010011	
	2c	1		GI	ROUND EL	EV. 15	82.67 (m)		12/16/98	NE	ELEV. M	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead				BACKFILLED	_YesD	ATE <u>12/16/1998</u>
ľ	ELEV.	DEPTH	SAI		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT		ESCRIPTION		REMARKS
⊦	(m)	(m)	NO.	TIFL	Increments	300 mm	Recov'd		Gioup						Poor recovery.
		_ 20.24	X						-						
		_													
	1561.67 -	-21													
		-													
		21.64								21.64					
			Y					w, PI, Sv		21.01					
	1560.67 -	-22													
		-													
		-													
	1559.67 -	-23													
		-													
		-													
	1558.67 -	-24													
		-													
		-													
	1557.67 -	-25													
		-													
		-													
		-													
	1556.67 -	-26													
	1550.07	_ 20													
		-													
		-													
	4555 67	-													
	1000.07 -	– 2/													
		_													
5		-													
5/11/(-													
DT	1554.67 -	-28													
0T.0		_													
NV		-													
J L HE		+													
15D.(1553.67 -	29													
0620		Ļ													
0T 0		-													
		-													

							10	/5/00			EXPL	ORATIO	N LOG				
					S	TART DATE	10	/7/00								S	HEET 1 OF 3
					EI	ND DATE	10	1 500		vtonal	n Droice	~ +		STATION	74+01 "P	1"	
					JC	DB DESCR	PTION	1-580	Freeway E	xtensi	on Projec	זנ		OFFSET	<u>7.95 RT</u>		
	(H)				LC	OCATION		asnoe (Jounty, Nev	vada				ENGINEER			
	21.W		5		B	ORING	07	3+90			[]	EQUIPMENT	ACKEF Peterson		
	MA		C)		E.	A. #	00	79-01-5	5		GROU	NDWATER	RLEVEL	OPERATOR	Feleison		<u> </u>
	in the	/			G	ROUND EL	EV. 15	72.54 (m)		DATE		ELEV. m	METHOD	HQ Core		
			1	1	н	AMMER DF	ROP SYS	STEM_R	Rope - Cathe	ead	10/1/35			BACKFILLED	Yes [DATE	10/12/1999
				SAI	MPLE	BLOW C	OUNT									1	
	ELEV. (m)		рін m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MAT	ERIAL DE	ESCRIPTION			REMARKS
			0.00	Α					w, PI, Sv			Soft, com	pletely wea	thered, brown g	rey,		
		_										possible la	andslide de	posit with a Clay	vey to Silty		
		_										Sandy Gr	avel consis	tency.			
		-															
	1571.54 ·	+1															
		_	1.52	В					w, PI, Sv	-							
		_															
	1570.54	-2															
		-	0.44														
			2.44	<u> </u>	ODT	30	50/54			-							
			2.74	C	501	50/51	50/51			_							
	1569.54	-3	3.05														
		_		U					w, F1, Sv								
		-															
		-	3 81														
	1500 54		0.01	F	SPT	28	50/102			-							
	1008.04	-4	4.11	-		50/102	00,102			-							
		_															
		-															
		-															
	1567.54	-5															
		_	5.33	F	SPT	45	15			-							
		_	0.10			0				-							
		_															
	1566.54	-6															
		F										⊢ormatior	n changes d	olor to dark grey	y.		
		Ľ															
			6.86														
	1565.54	-7	7.01	G	SPT	50/102	50/102			-							
		-															
		-										Difficult di	rilling - fines	washing away	- poor		
/01		-										lecovery.					
5/11	1564.54	8															
GDT		Ļ															
DOT.		-															
N		-										Soft zone	- drilled wit	h no head press	sure to 9.75		
GPJ	4500 51	-										meters. N	io recovery.				
15D.(1563.54	-9															
0670		_															
DT 0		-															
V_D(-															
z		1					1	1									

ſ						10	0/5/00			EXPLO	ORATIO	N LOG			
				S	FART DATE	10)/J/99								SHEET 2 OF 3
				El	ND DATE)///99	 		n Draiae			STATION	74+01 "P1"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Projec	:t		OFFSET	7.95 RT	
	.m.			LC	OCATION		ashoe (County, Nev	ada				ENGINEER	Ackor	
	2 Mr	6		B	ORING	0/	3+90		r				EQUIPMENT	Peterson	
	Ą			E.	A. #	00	079-01-5	5		GROU					
	2			G	ROUND EL	EV15	572.54 (m)		10/7/99	NE	ELEV. M	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMR	lope - Cathe	ead				BACKFILLED	_Yes DA	TE <u>10/12/1999</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
		-													
		-									Color cha	inge to dark	grey. Formation	n slightly	
											more inta	ct with little	fine matrix.		
	1561.54	<u>11</u>													
		-													
		-													
	1560.54	-12													
		-													
		-													
	1559.54	-13													
		-													
		-								13.41	Moderate	ly hard, dar	k grey, weather	ed,	
											shattered	to highly fr	actured Metased	dimentary	
	1558.54	-14									Dearock.				
		-													
		-													
		-									Zone of fa	aulting 1 me	eter thick.		
	1557.54	-15										-			
		-													
		-													
		-													
	1556 54	-16													
	1000.04	-													
		-													
		-													
	1555 54	- 17													
	1555.54	- "													
		-													
,01		-													
5/11/	1551 51	L 10													
GDT	1004.04														
DOT.(-													
		F													
GPJ	1660 54														
115D.	1003.54	- 19													
0670C		F													
DT 0		+													
		-													

							1(0/5/00			EXPLORATION LOG			
					ST	ART DAT	E							SHEET 3 OF 3
					EN	D DATE	10	<u>)///99</u>				STATION	74+01 "P1	"
					JO	B DESCR	IPTION	1-580	Freeway E	xtensio	n Project	OFFSET	7.95 RT	
	. Inc.				LO	CATION		ashoe (County, Nev	ada		ENGINEER	 Ackor	
	1 Mr	e La			BO	RING	0	3+90		r		EQUIPMENT	Peterson	
	Ĩ,				E.A	. #	00	079-01-5	5		GROUNDWATER LEVEL		100000	
	Ž.				GR	OUND EI	_EV1	572.54 (m)	F	10/7/99 NE	METHOD	HQ Core	
					HA	MMER D	ROP SYS	STEM R	ope - Cathe	ead		BACKFILLED	_YesD/	ATE 10/12/1999
	ELEV.	DEPTH	I S/	AMP	LE	BLOW (Percent		USCS		SCDIDTION		DEMADKS
	(m)	(m)	NC	רד (YPE	Increment	300 mm	Recov'd	LAD TESTS	Group		SCRIPTION		REWIARKS
		-												
		-									Harder and slightly le	ss fractured.		
		Ľ												
	1551.54	-21												
		-												
		-												
		F												
	1550 54	-22												
		-												
		-												
		-												
	1540 54	- 22												
	1349.34	- 23												
		-												
		-												
	4540 54	-												
	1548.54													
		-												
		-												
		-												
	1547.54	-25												
		_												
		-												
		-												
	1546.54	-26												
		F												
		-												
	1545.54	-27												
		Ļ												
11/01		\vdash												
JT 5/	1544.54	-28												
DT.GI														
		F												
۲ ۲		-												
SD.GF	1543.54	-29												
79015		-												
T 00.											20.72			
DO		_									29.72			
≥														

				_		3/	28/00			EXPLORATION LOG			
				ST			31/00					474.00 "0	SHEET 1 OF 4
				EN			1,00 1_580	Freeway F	vtenciu	n Project	STATION	1/4+30 "P"	1A [*]
				JC	DB DESCRI	PTION W	2500-1-000		vada		OFFSET	42 K I	
	22			LC	DCATION	 7	23100 C	2001 ty, 1404	uuu			CME 850	
	N. N.			BC	DRING		4+30 170_01_F	5				Larson	
	1			E.,	A. #	15	52 59 (, m)		DATE DEPTH m ELEV. m	DRILLING		
				GI	ROUND ELI	EV	000.00 (N	III) IA		3/31/00 NE	METHOD		2/21/2000
				HA	AMMER DR	OP SYS	STEM				BACKFILLED	DA	TE
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	1552.58 - 1551.58 -	- - - - - - - - - - - - - - - - - - -							GC	Deposits with soil ind Gravel with Sand.	n to grey, Outw ex properties o	vash f a Clayey	
	1550.58 - 1549.58 -	- - - - - - - - - - - - - - - - - - -								4.57			
	1548.58 -	- 5 - -								Slightly moist, modera olive grey to green, R and Outwash Deposi properties of a Clayey	ately to well cer eworked Metas ts with the soil Gravel/Sand.	mented, sediments index	
	1547.58 -	- - 6 -							GP				
01	1546.58 -	- - - -							GC				
NV_DOT.GDT 5/11/(1545.58 -	- - 8 -								8 84			
0079015D.GPJ	1544.58 -	- - -								Moderately hard to ha weathered, variably fr Metasedimentary Bed	ard, moderately actured, blue g drock	rey,	
NV_DOT		_								Close Fractured.			

Ĩ						3/	28/00			EXPLORATION LOG			
				ST	TART DATE	<u> </u>	20/00						SHEET 2 OF 4
				E١	ND DATE	3/.		Eroowov F	vtoro	n Broiget	STATION	174+30 "F	'1A"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	0.42 RT	
	34			LC	OCATION		asnoe (County, Nev	ada		ENGINEER		
	2MM			BC	ORING		4+30				EQUIPMENT	Larson	
	Z.			E.	A. #	00	079-01-5	5		GROUNDWATER LEVEL			
	Ľ			GI	ROUND EL	EV15	553.58 (m)		3/31/00 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM _N	IA			BACKFILLED	Yes D	ATE 3/31/2000
	ELEV.	DEPTH	SAI		BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	<u>300 mm</u>	Recov'd		Cicup	Very Close Fractured	with clay fractu	ure filling.	
		-											
		-											
	15 10 50	-											
	1542.58	-11											
		_											
		-											
		-											
	1541.58	-12											
		_											
		-											
	1540.58	-13											
		_											
		-								Shattered.			
	1539.58	- 14											
		-											
		_											
	1538.58	- 15											
		-											
	1537.58	-16											
		-											
		-								Very Close Fractured	to Shattered w	vith minor	
		Ľ								fracture filling.			
	1536.58	-17											
		-											
		-											
/01		-											
5/11	1535.58	18											
GDT		-											
DOT.		-								Shattered.			
N		-											
GPJ	1524 59	10											
015D.	1004.00	- 19											
0079C		_											
OT (-											
NV_D		<u> </u>											

[2/	28/00			EXPLORATION LOG		
				ST	FART DATE	<u> </u>	20/00					SHEET 3 OF 4
				E١	ND DATE		31/00	 		n Drainat	STATION	P1A"
				JC	DB DESCRI	PTION	1-580	Freeway E		on Project	OFFSET 0.42 RT	
	- An-			LC	OCATION	V	ashoe (County, Nev	ada		ENGINEER JRO	
	JWW M	0		BC	ORING	07	4+30				EQUIPMENT CIVIE 050	
	Ä			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL		
	Že			GI	ROUND EL	EV. 15	53.58 (m)		JATE DEPTH m ELEV. m 3/31/00 NF	METHOD HQ Core	
			1	HA	AMMER DR	OP SYS	STEM N	IA			BACKFILLED Yes	ATE 3/31/2000
ŀ		DEDTU	SAI	MPLE	BLOW C	JUNT			11909			
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LABTESTS	Group		SCRIPTION	REMARKS
		_										
		-										
		-										
	4522 50	-										
	1532.56 -											
		_										
		-										
		-										
	1531.58 -	-22										
		Ľ										
		_								Close Fractured with	minor fracture filling	
		-								Close r lactured with	minor fracture mining.	
	1530.58 -	-23										
		-										
										Verv Close Fractured	ł.	
	1529.58 -	-24										
		-								Close Fractured.		
		-								Very Close Fractured	to Shattered with minor	
		-								fracture filling.		
	1528.58 -	-25										
		-										
		-										
		-										
	1527.58	-										
	1527.56											
		F										
		-										
	1500 5-	-										
	1526.58 -	-2/										
		Ļ										
Ĺ		-										
/11/0		-										
DT 5.	1525.58 -	-28										
DT.GI												
		Ļ										
ي ۲		F										
SD.GF	1524.58 -	-29										
79015		-										
T 007		Ľ										
Бď		_										
≥́												

ĺ						2/	28/00			EXPL	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	20/00								SHEET 4 OF 4
				E١	ND DATE		31/00	 					STATION	174+30 "F	P1A"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Projec	л Л		OFFSET	0.42 RT	
				LC	OCATION	V	ashoe (County, Nev	ada				ENGINEER		
	2MM			BC	ORING		4+30						EQUIPMENT	Larson	
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROU				Laroon	
	2c			GI	ROUND EL	EV15	53.58 (m)		3/31/00	NE		METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM	IA					BACKFILLED	_YesD	ATE 3/31/2000
	ELEV.	DEPTH	SAI	MPLE	BLOW CO		Percent		USCS		MATI				DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB ILSIS	Group	00.40					REMARKS
		-								30.18					
		-													
	1522.58 -	-31													
		-													
		-													
	1521.58 -	-32													
		-													
		-													
	1520.58 -	-33													
		-													
		-													
	1519.58 -	-34													
		-													
		-													
	1518.58 -	-35													
		-													
		-													
		Ľ													
	1517.58 -	-36													
		-													
		-													
		-													
	1516.58 -	-37													
		-													
		-													
/01		-													
5/11	1515 58	-38													
GDT	.010.00	-													
DOT.		-													
Š		-													
GPJ	1514 58	-39													
015D.	1017.00	- 33													
0079		-													
ğ		-													
		-													

Γ							10	/5/00			EXPLORATION I	LOG			
					ST	FART DATE		10/33							SHEET 1 OF 3
					E	ND DATE	10	1 500	Eroower 5	vtono	n Project		STATION	74+61 "P1"	
					JC	DB DESCR		1-000		xtensio	n Projeci		OFFSET	<u>10.76 RT</u>	
	- Am				LC	DCATION				aua			ENGINEER	Acker	
	No.	e	3		BC	ORING		4+49 (/						Peterson	
	1				E.	A. #		50 04 () m)		DATE DEPTH m E	EVEL LEV. m	DRILLING		
	be				GI	ROUND EL	EV10	02.24 (E	III) Popo Cath		10/7/99 NE		METHOD		10/7/1000
			1)		HA	AMMER DF	ROP SYS	STEM	tope - Calife	au			BACKFILLED	DAT	E 10/7/1999
	ELEV. (m)	DEP (m	PTH ו)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATER	RIAL DE	SCRIPTION		REMARKS
		_									grey Silty Gr	st, very de ravelly Sa	ense, brown to t and of the Mour ant cobbles and	orown It Rose	
		-									both compete	tent and c	completely weat	hered.	
		-													
	1551.24	-1													
		-													
	4550.04	-													
	1550.24	<u>-</u> 2													
		-													
		-													
	15/0 2/	13													
	1043.24		2 25												
		-	3.35	A					w, Sv	-					
		F													
	1548.24	4													
		+													
		-													
	1547.24	-5													
		+													
		-													
	1546.24	-6													
		-													
										SM					
		-													
	1545.24	+7													
			7.32	В					w, Sv	-					
-		-													
5/11/0		-													
DT 6	1544.24	1 8													
DT.G		Ļ													
		F													
GPJ	1540.04	Ļ.													
015D.	1543.24	- 9													
0079(-													
D		F													
N															

						10	/5/00			EXPLO	ORATIO	N LOG			
				ST	FART DATE		vz/00								SHEET 2 OF 3
				E١	ND DATE		1//99						STATION	74+61 "P1'	1
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Projec	t		OFFSET	<u>10.76 RT</u>	
				LC	OCATION		ashoe (Jounty, Nev	ada				ENGINEER	Acker	
	-2MM	0		BC	ORING	07	′4+49 (<i>F</i>	Angle)	r				EQUIPMENT	Peterson	
	4			Ε.	A. #	00	79-01-5	5		GROU				1 6(613011	
	Ĩ.			GI	ROUND EL	EV15	52.24 (m)		10/7/99	NE	ELEV. M	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEMR	ope - Cathe	ead				BACKFILLED	_YesDA	TE10/7/1999
	ELEV/	DEPTH	SAI	MPLE	BLOW CO	OUNT	Destant		LISCS						DEMARKO
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LABIESIS	Group		INA H	ERIAL DE	SCRIPTION		REMARKS
		_													
		-													
		-													
	15/11 2/ -	- 11													
	1041.24	-													
		_													
		-													
	1510.01	-													
	1540.24 -	- 12													
		_													
		_													
		-													
	1539.24 -	- 13								13.11	Chattarad	weathered	diaturbad		
											Metasedir	nentary Be	drock. Harder d	dark grey	
		_									rock fragn	nents in sof	t, brown grey, fi Silty Sandy Gra	ine matrix	
		-									Possible la	andslide de	posit.		
	1538.24 -	14													
		-													
		_													
	1537.24 -	- 15													
		-													
		_													
		_													
	1536.24 -	-16 _{16 15}													
		-	C					w, Sv							
		Ľ													
		Ĺ													
	1535.24 -	-17													
		-													
		-													
1/01															
5/1-	1534.24 -	-18													
.GDT		-													
DOT		-													
N		-													
GPJ	1533.24 -	-19													
015D		-													
0079		+													
TOC		-													
NV_L		_													

						10	/5/00			EXPLORATION LOG			
				ST	FART DATE	10	/7/00						SHEET 3 OF 3
				E	ND DATE		1 5 9 0	Erooway E	vtoncio	n Project	STATION	74+61 "P1	
				JC	DB DESCRI	PTION	1-000				OFFSET	MG	
	- An			LC	DCATION				aua		ENGINEER	Acker	
	Mar			BC	DRING		70_01_4					Peterson	
	1			E.	A. #	15	52 24 (m)		DATE DEPTH m ELEV. m	DRILLING	HO Core	
				GI		EV. <u> </u>	<u> </u>	nne - Cath	bee	10/7/99 NE	METHOD		10/7/1999
				HA	AMMER DR	OP SYS					BACKFILLED	DA	ATE
	ELEV. (m)	DEPTH (m)	NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_								Poor recovery to 19.8	8 meters with be	etter n is fairly	
		_ 20.42	D					w, PI, Sv	_	uniform throughout.			
		-											
	1531 24 -												
		-											
		-											
		-											
	1530.24 -	-22											
		-											
		-											
	1529.24 -	-23											
		_											
		-											
	1528.24 -	-24											
		-											
		-											
		_											
	1527.24 -												
		-											
		-											
	1526.24 -	-26											
		-											
		-											
		_											
	1525.24 -	-27											
		-											
1/01		_											
T 5/1	1524.24 -	-28											
T.GD		-											
DOD_/													
N ار		-											
5D.GF	1523.24 -	-29											
79015		-											
T 00		F											
_DO		-								29.78			
ź		1	1				1						

					-		Q/	22/90			EXPLO	ORATIO	N LOG			a
					S		= <u>-0/.</u> 10)/2/00							74.00 "	SHEET 1 OF 3
					EI	ND DATE		1_500		vtencio	n Proioc	` †		STATION	<u></u>	21"
					JC	OB DESCR	PTION	006-1		xtensic	in Projec	1		OFFSET		<u>`````````````````````````````````````</u>
	54				LC	OCATION			$\frac{1}{2}$ ounty, inev	/ada				ENGINEER	Acker	
	1 MM	5	5		B	ORING	0/	′4+49 (\	/ert.)	r				EQUIPMENT	Petersoi	
	Ĩ,		61		E.	A. #	00	079-01-5	5		GROU				1 6(6130)	<u> </u>
	ž	~			G	ROUND EL	EV15	547.08 (m)		DATE 10/2/99	DEPTH m NF	ELEV. m	METHOD	HQ Core	9
)	\mathbf{v}	6	H	AMMER DF	ROP SYS	STEMR	Rope - Cath	ead				BACKFILLED	Yes	DATE10/2/1999
	ELEV. (m)	DE (:PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	1546.08 -	- - - - -								SP		Slightly m grey, Poo <5% non- 30% fine t	oist, moder rly Graded plastic fines o coarse g	ately dense, bro Sand With Grav s, 70% fine to co ravel.	own to vel with barse sand,	
		-	1.52							4						
				А	SPT	6 8	20	56								
	1545.08	-2	1.98			12				-						
		-									2.29					
		-	2 59									Moist, mo	derately de	nse, pale green	, Clayey	
		-	2.00	_		9				1		50% fine t	o coarse s	and, 20% fine g	ravel.	
	1544.08	Ľ,	3.05	В	SPT	18 27	45	67		SC						
	1344.00															
		-														
		-									3.66	Malat day		0		_
		-										low plastic	se, brown, fines, 10%	6 fine to coarse	sand, 60%	
	1543.08	-4	1 27							GC		fine to coa	arse gravel.			
		_	4.27	C	СDT	16	50/127	36		-						
			4.57	U	SFI	50/127	50/127	30			4.57	Moiot don	a brown	to grove Clavov	Sand	_
		-										With Grav	el with 20%	6 low plastic fine	es, 50%	
	1542.08	-5								SC		fine to coa	arse sand, 3	30% fine to coar	se gravel.	
		-									5.33					
												Moist, der Gravel wit	nse, grey to th 30% low	pale green, Cla plastic fines, 10	iyey)% fine to	
		_								GC	5.04	coarse sa	nd, 60% fir	e to coarse gra	vel.	
	1541.08	-6									5.94	Very hard	, slightly we	eathered, highly	fractured,	-
		-										dark blue	grey, Meta	sedimentary Be	drock.	
		-	6.55									25-50% of	f rock mass	s and is compos	ed of low to)
			6.71	D	SPT	50/64	50/64	80		-		medium p	lastic Sand	ly Clay and Clay	vey Sand.	
	1540.08	-7														
		-														
		-														
/01		-														
5/11	1539.08	8														
GDT	1000.00	Ļ										Fracture fi	illina comp	rises 50-60% of	rock mass.	
DOT.		-											J - J			
N		F									8.75					
GPJ	4500.00	F _										Hard, mod	derately we	athered, shatter	ed, dark	
15D.	1538.08	-9										Bedrock.	Fracture fil	ey, metaseanne ling comprises	n ital y	
06200		F										approxima	ately 30-40	% of rock mass.		
OT C		-														
		-														
~																

						Q/	22/00			EXPLO	ORATIO	N LOG			
				S	FART DATE	<u> </u>	~~/33							SHEET 2 O)F 3
				El	ND DATE	10	1 500	Eroower 5	vtonaia	n Droine	.+		STATION	2 "P1" T	
				JC	DB DESCRI	PTION	1-00U			n Projec	1		OFFSET		
	-she			LC	OCATION				aua				ENGINEERAcko		
	2 Mm			B	ORING		4+49 (V	vert.) -	[0.000			EQUIPMENT ACKE	son	
	The second se			E.	A. #		179-01-	, ,				ELEVEL	DRILLING		
	le			G	ROUND EL	EV15	947.08 (m)		10/2/99	NE		METHOD HQC	ore	
				H	AMMER DR	OP SYS	STEM	cope - Catho	ead				BACKFILLED Yes	DATE10/2/199	99
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION	REMARKS	
		-													
		-													
		-													
	1536.08	-11									Abundant	FeOx in fra	actures.		
		-													
		+													
	1535.08	-12													
		-													
		-													
	4504.00	-													
	1534.08	- 13													
		-													
		-								13.78					
	1533.08	L 14									Hard to ve	ery hard, sli	ghtly to moderately		
	1000.00	-									dark blue	grey, Meta	sedimentary Bedrock.		
		-													
		-													
	1532.08	-15													
		-													
		-								15.42	Soft. high	v weathere	d. shattered. disturbed		
											Metasedi	mentary Be	drock with olive matrix		
	1531.08	-16									landslide	deposit.	agments. Possible		
		-									Fracture f	illing comp	rises 60-70% of rock ma	SS.	
		-													
	1530.08	-17													
		-													
1/01		F													
T 5/1	1529.08	-18													
T.GD		-													
/_D0		Ľ													
N Lc		F													
5D.GF	1528.08	- 19													
79015		-													
T 00															
DO_/		-													
ź							L								

						/s	22/00			EXPL	ORATIO	N LOG			
				S	TART DATE	10/	22/33								SHEET 3 OF 3
				EI	ND DATE		1 5 9 0	 	vtonoio	n Draia	~4		STATION	74+62 "P1"	
				JC	OB DESCRI	PTION	1-06U			n Projec	<i>.</i>		OFFSET		
	54			LC	OCATION			Jounty, Nev	aua				ENGINEER	Acker	
	2 Mart			B	ORING		4+49 (\	/ent.)	r					Peterson	
	4			E.	A. #		179-01-5)	ŀ				DRILLING		
	2			G	ROUND EL	EV15	947.08 (m)	[10/2/99	NE		METHOD	HQ Core	4.0/0/4.000
				H.	AMMER DR	OP SYS	STEMR	ope - Catho	ead				BACKFILLED	Yes DA	TE10/2/1999_
	ELEV.	DEPTH			BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd								
		_									Zono of c	lov rich mot	orial		
		-										ay non ma	enal.		
	1526.08	-21													
		-													
		-													
	1525.08	-22													
		-													
		-													
	1524.08	-23													
		_													
		-													
		-													
	1523.08	-24													
		-								24.38	Slightly b	ard dark ar	ov oxtromoly fro	actured	
		-									weathered	d Metasedi i	mentary Bedroc	k .	
	1522.00	- 25													
	1522.06	-25													
		-													
		-													
	1521.09	- 26													
	1521.00	– ²⁰													
		-													
		-													
	1520.08	 													
	1020.00	-													
		-													
/01		-													
5/11	1519.08	-28													
GDT	1010.00	- 20													
DOT.		-													
N		-													
(GPJ	1518.08	-29													
015D															
5200		-													
DOT		Ľ								20.97					
N										29.01					

						11	/4/00			EXPLORATION LOG			
				ST	FART DATE	<u> </u>	/4/99						SHEET 1 OF 3
				El	ND DATE		///99				STATION	76+74 "P1	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	0.88 R I	
				LC	OCATION		ashoe (County, Nev	ada		ENGINEER	Acker	
	1 Mm			BC	ORING	07	6+50 (A	Angle)			EQUIPMENT	Peterson	
	Ä			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	He .	1		GI	ROUND EL	EV. 15	51.31 (m)		11/7/99 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	_YesDA	TE <u>11/7/1999</u>
	ELEV.	DEPTH	SAI		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	ITE	Increments	<u>300 mm</u>	Recov'd		Gloup	Hard, moderately frac	ctured, blue gre	y, slightly	
										weathered Metasedir	nentary Bedroc	k	
		-								congiomerate.			
		-											
	1550.31	<u>+</u> 1											
		-											
		-											
	1549.31	-2											
		-											
		_											
	1548.31	-3											
		-											
		-											
	1547.31	-4											
		-											
		-											
										Shattered zone with o	clay infilling 0.7	meters	
	1546.31	-5											
		-											
		-											
	1545.31	-6											
		-											
		-											
	1544.31	- 7											
		-											
		-											
1/01													
5/1;	1543.31	-8											
.GDT		-								Liably frostyred and	modorotoly	othered	
DOT		-								with few small shatte	red zones.	amereu	
Ň		Ĺ											
J.GP,	1542.31	-9											
3015L		-											
3200		F											
DOT		Ľ											
N		Ĺ											

						11	/4/00			EXPLORATIO	N LOG			
				ST	FART DATE		/4/99							SHEET 2 OF 3
				E	ND DATE	11	///99					STATION	76+74 "P1"	I
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Project		OFFSET	0.88 RT	
				LC	OCATION	W	ashoe (County, Nev	/ada			ENGINEER	MG	
	Mr	to T		BC	ORING	07	′6+50 (<i>I</i>	Angle)	r			EQUIPMENT	Acker	
	Ä			E.	A. #	00	79-01-8	5		GROUNDWATE	R LEVEL	OPERATOR	Peterson	
	in the			GI	ROUND EL	_{EV.} _15	51.31 (m)		DATE DEPTH m	ELEV. m	DRILLING METHOD	HQ Core	
				н	AMMER DR	OP SYS	STEM F	ope - Cath	ead	11/7/99 NE		BACKEILLED	Yes _{DA}	TF 11/7/1999
			SAI		BLOW C					1				
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm	Last	Percent Recovid	LAB TESTS	USCS Group	MAT	ERIAL DE	SCRIPTION		REMARKS
							11000114							
		_												
		-												
	1540.31 -	-11												
		-												
		-												
										11 80				
	1539.31 -	-12								Moderate	ely fractured	and slightly wea	athered.	
		-												
		-												
		-												
	1520.21	- 12												
	1000.01	- 13												
		-												
		-												
		-												
	1537.31 -	- 14												
		-												
		-												
	1536.31 -	- 15												
		-												
		_												
	1535.31 -	- 16												
		-												
		Ľ												
		Ĺ												
	1534.31 -	-17												
		-												
		F												
/01		Ľ												
5/11	1533.31 -	18												
GDT		-								18.29				
DOT.		-								Very har	d, moderatel	y to highly fract	ured, blue	
N		-								grey to d Metased	ark grey, fine mentary Be	e grained drock .		
GPJ	4500.01	-												
15D.(1532.31 -	19												
0620		L												
0 TC		-												
		-												
z		1	1				1		1	1				

				_		_ 11	/4/99			EXPLO	ORATION	LOG			
				S	TART DATE	11	/7/00								SHEET 3 OF 3
				EI	ND DATE		11/99	 		n Draiae	-1		STATION	+74 "P1"	
				JC	OB DESCR	PTION	1-000		xtensio	n Projec	<i>.</i>		OFFSET	<u>8 R I</u>	
	200			LC	OCATION		ashoe (Sounty, Nev	ada				ENGINEERAC		
	2 Mm			B	ORING		0+50 (/	- -	r				EQUIPMENT Pet	terson	
	<i>A</i>			E.	A. #		079-01-	<u>,</u>		GROU		LEVEL			
	2			G	ROUND EL	EV15	51.31 (m)		11/7/99	NE		METHOD HG	Core	44/7/4000
			N	H.	AMMER DF	ROP SYS		cope - Cathe	ead				BACKFILLED Yes	S DATE	
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MATE	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd		Cicup						
		_													
		_													
		-													
	1530.31	-21													
		_													
		-													
		-													
	1529.31	-22													
		_													
		-													
		-													
	1528.31	-23													
		_									Highly frac	tured to sh	attered and slightly		
		-									weathered				
	4507.04	-													
	1527.31	24													
		-													
		-													
	1526 31	25													
	1020.01	-													
		-													
	1525.31	-26													
		-								26.21					
		-													
		_													
	1524.31	-27													
		-													
		-													
1/01		_													
Γ 5/1	1523.31	-28													
T.GD ⁻		-													
		F													
NN P		F													
D.GP	1522.31	-29													
9015		-								20 /1					
Γ 007		Ĺ								23.41					
		_													
N															

							. 11	/1/99			EXPLORATION LOG	
					ST		· _ · · 11	/3/00				SHEET 1 OF 4
					E			1-580	Freeway F	vtonci	Project STATION 70	
					JC	DB DESCRI	PTION	ashoo (vada	OFFSET M	<u>, 14 KI</u> G
	14				LC	DCATION	07	25100 C	/ort)	aua	ENGINEER	cker
	× N				BC	DRING		070 01 F	5			eterson
	La				E.	A. #		24 04 (m)		DATE DEPTH m ELEV. m DRILLING	0 Coro
	1 c				GI	ROUND EL	EV	034.04 (D	iii) Dono Coth		<u>11/3/99 NE</u> МЕТНОД <u>Н</u>	
			1)		HA	AMMER DR	OP SYS	STEM	tope - Calin		BACKFILLED	DATE
	ELEV. (m)	DEPT (m)	Ή	SAN NO.	MPLE TYPE	BLOW Co 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		REMARKS
	1533.04	- - - -									Gravely Sand colluvium with estimated 2 low plastic fines, 55-60% fine to coarse s 15-20% fine to medium gravel.	, 25% sand,
	1532.04 -	- - - - 2 - 2	.44									
	1531.04	- - 2. 3	.90	A	SPT	17 19 21	40			-	Poor recovery.	
	1530.04	3. 4 4.	.96	В	SPT	10 13 15	28			sc		
	1529.04	- - 5 - 5.	.49									
	1528.04 -	- - 5. - 6 -	.94	С	SPT	16 22 12	34			-	Minor small cobbles.	
	1527.04 -	- - - - - 7.	.01	D	SPT	11 19 19	38			_		
OT.GDT 5/11/01	1526.04										0.50	
UV_DOT 0079015D.GPJ NV_DI	1525.04	<u>8</u> . - 9 - - -	.99	E	SPT	35 27 25	52			-	8.53 Slightly moist, dense to very dense, brow grey Silty Gravelly Sand with estimated 20-25% slightly plastic fines, 50-60% fine coarse sand, 15-30% fine to coarse grav small to medium cobbles.	vn e to el. Few

						_ 11	/1/00			EXPLO	ORATIO	N LOG		-	
				S			/3/00						70.0	0 "04"	SHEET 2 OF 4
				El	ND DATE		1_520	Freeway E	vtonci	n Projo	` †		STATION	8 "P1" 1 DT	
				JC	DB DESCRI	PTION				in rojec	,		OFFSETMG	+ K I	
	- Arr			LC	OCATION			(ort)	aua					r	
	5 Mm			B	ORING			-					EQUIPMENT Peter	son	
	Z.			E.	A. #		079-01-5	, ,							
	te			G	ROUND EL	EV15	34.04 (m)		11/3/99	NE		METHOD HQC	ore	/
				H	AMMER DR	ROP SYS	STEM	Rope - Cath	ead				BACKFILLED Yes	DATE	11/3/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		10.06	_		14				1						
		10.52	F	SPT	19 25	44									
		-							1						
	4500.04	-													
	1523.04														
		_ 11.43													
		_	G	SPT	17	44									
		- 11.89			24				4						
	1522.04	- 12							SM						
		_													
		_													
	1521.04	13 13.11													
		-	н	SPT	25 33	67					Zones of o	clayey fines	around few degraded		
		13.56			34				4						
		_													
	1520.04	- 14													
		-													
		-									Poor reco	very.			
		_													
	1519.04	- 15													
		-													
		-								15.54					
		_									Hard, slightly to	htly weathe	red, reddish brown, / fractured Volcaniclast	ic	
	1518.04	16									Conglom	erate.			
		-													
		-													
		-													
	1517 04	_ 17													
		+													
		-													
01		-								17.68	Coff to all		hunning august biabbits		
5/11/	1510.04	-									completel	y weathere	d, highly fractured		
GDT	1516.04	_ 10									Volcanic	Mudflow.			
DT.C		-													
		-													
- L H		+													
15D.C	1515.04	19													
0620		-													
DT O		-													
		-													
z		<u>i</u>	I	I	1	1	L	I	1						

						11	/1/00			EXPLO	ORATIO	N LOG			
				SI	FART DATE	<u> </u>	/1/99								SHEET 3 OF 4
	Ĩ			E١	ND DATE	11	/3/99			Б.			STATION	76+68 "P1	"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Projec	t		OFFSET	<u>30.14 RT</u>	
				LC	OCATION		ashoe (County, Nev	ada				ENGINEER	MG	
	-2MM	6		BC	ORING	07	6+50 (\	/ert.)	r				EQUIPMENT	Peterson	
	Ä			Ε.	A. #	00	79-01-5	5		GROU	NDWATER			1 6(613011	
	Ž			GI	ROUND EL	EV15	34.04 (m)		DATE 11/3/99	NF	ELEV. M	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEMR	lope - Cathe	ead				BACKFILLED	_YesDA	ATE 11/3/1999
	FI FV	DEPTH	SAI	MPLE	BLOW C		Doroont		USCS		NAAT				DEMADIZE
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LABIESIS	Group			ERIAL D	ESCRIPTION		REMARKS
		_													
		_													
		-													
		-													
	1513.04 -	-21													
		_													
		-													
	1512.04 -	-22								22.10					
		-									Soft, com arev. distu	pletely wea urbed Meta	athered, brown to sedimentary Be	o olive drock	
		_									fault goug	e material.	, <u>,</u>		
		_													
	1511.04 -	-23													
		-													
		-													
		-									Slickensic	de.			
	1510.04 -	- 24								23.93	Soft olive	arev com	nletely weather	ad	
	1010.01										disturbed	Metasedin	nentary Bedrock	c fault	
		_									gouge ma	aterial.			
		-													
		-													
	1509.04 -	25													
		_													
		_													
	1508.04 -	-26													
		-													
	1507.04 -	-27													
		-													
		-													
<u>(</u> 01		-													
5/11,	1506.04	-													
3DT	1000.04 -	- 20													
OT.C		-													
⊇_ ≥		-													
ų Lď		-													
5D.G	1505.04 -	- 29													
1061															
ЧТ 00		-													
/ DC		-													
ź		1	1												

						. 11	/1/00			EXPLO	ORATIO	N LOG			
				S	FART DATE	11	/3/00								SHEET 4 OF 4
				El	ND DATE		15/99	 Eroowov E	vtonoio	n Broioc			STATION	76+68 "P1	
				JC	DB DESCRI	PTION	1-500		xtensic	n Fiojec	1		OFFSET	<u>30.14 RT</u>	
	- Arr			LC	DCATION			Journey, Nev	aua				ENGINEER	Acker	
	5 Mrv	-		B	DRING			-	[00011				Peterson	
	Ţ			E.	A. #		079-01-0)		DATE		FIFV m	DRILLING		
	20			G	ROUND EL	EV15	534.04 (m)		11/3/99	NE		METHOD	HQ Core	44/0/4000
				H	AMMER DR	OP SYS	STEM _	tope - Cathe	ead				BACKFILLED	YesDA	TE 11/3/1999
	ELEV.	DEPTH	SAI NO.		BLOW C	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION		REMARKS
	(11)	30.18			Increments	300 mm	Recovid								
		_		SPT	19 26	60									
		_ 30.63			34					30.63					
		-													
	1503.04 -	-31													
		_													
		-													
	1502.04 -	-32													
		Ľ													
		-													
		-													
	1501.04 -	-33													
		_													
		-													
		-													
	1500.04 -	34													
		-													
		-													
	1499.04 -	- 35													
		_													
		_													
		-													
	1498.04 -	-36													
		_													
		-													
	1497.04 -	-37													
_		_													
'11/0'		-													
DT 5,	1496.04 -	-38													
DT.GI															
DD		-													
N N		-													
5D.G	1495.04 -	- 39													
1061															
)Т 00		-													
V_DC		-													
z		1	1	1					1	1					

							6/00			EXPLO	ORATIO	N LOG			
				S			7/00							70.70 "04"	SHEET 1 OF 4
				E١	ND DATE	4/	1.00		vtenci	n Proio	~ t		STATION	/6+73 "P1"	
				JC	DB DESCRI	PTION				JIFIOJE	<i>.</i>		OFFSET	18.97 LT	
	200			LC	DCATION		26172	Journy, Nev	aud				ENGINEER	CME 850	
	×.			BC	ORING		0+73			0000				Larson	
	1 m			E.	A. #)		DATE		FLEVEL	DRILLING		
	le			GI	ROUND EL	EV15	59.34 (<u>m)</u>		4/7/00	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS		IA					BACKFILLED	Yes DAT	E
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DE	SCRIPTION		REMARKS
		-							CL	0.70	Very mois olive brow severely to index prop	st to moist, s n, Metased o completel perties of a	soft, olive grey/g imentary Bedro y weathered wit Lean Clay.	green to ock very th the soil	
	1558.34 -	- 1 -									Soft to mo moderatel brown/gre very close	oderately have a second constraints of the s	rd, severely to d, olive etasedimentary o shattered.	/ Bedrock	
		_								1.52	Moderatel weathered	ly hard, sligl d, olive brow	htly to very sligh	ntly grey,	
	1557.34 ·	-2									Meta cong close fractis present	glomerate E tured. A hor at the base	Bedrock close to izontal clay sea of this unit.	o very am (2.5 cm)	
		-									Shallow to	o moderate	dip angle.		
	1556.34	-3													
		-									Madauata	to oto on dia	angle Madage	to alou	
	1555.34	-4									fracture fil	lling.	angle. Modera	ite clay	
		_													
	1554.34	5													
		-													
		-								5.82	Hard free	h blue area		norato	
	1553.34	-6									Bedrock \	variably frac	tured.	incrate	
		_									Moderatel moderate	ly close to c (35-55 deg	lose fractured, ree) dip angle.	with	
	1552.34 -	-7													
01		_									Close to v deg.)to ve	very close fra ertical dip an	actured with ste gle (85-90 deg.	eep (55-85).	
.GDT 5/11/	1551.34	- - -									Moderatel moderate	ly close to c to steep dip	lose fractured v angle.	vith	
NV_DOT		-													
015D.GPJ	1550.34	9													
NV_DOT 0079		-									Close to v steep dip	very close fr angle.	actured with mo	oderate to	

ĺ						4/	8/00			EXPLORATION LOG		
				ST	FART DATE	4/	7/00					SHEET 2 OF 4
				E١	ND DATE	_4/	//00			n Dusis st	STATION	1"
				JC	DB DESCRI	PTION	1-580	Freeway E		n Project	OFFSET 18.97 LI	
				LC	OCATION		ashoe (County, Nev	ada		ENGINEER JRU	
	W			BC	ORING	07	6+73		r		EQUIPMENT CIVIE 850	
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR Laison	
	and and			GI		_{EV.} _15	59.34 (m)		DATE DEPTH m ELEV. m	METHOD HQ Core	
			1	HA	AMMER DR	OP SYS		IA	[BACKFILLED Yes D	ATE4/7/2000
		DEDTU	SAI	MPLE	BLOW CO	DUNT	-		11808			
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION	REMARKS
		_										
		-										
		-										
	4540.04	-										
	1548.34											
		_										
		_										
		-										
	1547.34	-12										
		-										
												Loss of
		_										circulation at
	1546.34	-13										12.5 to 13 meters.
		-										
		-										
		_										
	1545.34											
		_										
		-										
		-								Moderately close to c	lose fractured, with	
	1544 34	- 15								moderate to steep dip	angle.	
	1044.04	-										
		-										
		_										
	4540.04	16										
	1543.34	16										
		_										
		-										
		-										
	1542.34 ·	-17										
		[
		_										
11/01		-										
Л 5/	1541.34	- 18										
T.GE		-										
00_												
∠ Z		Ļ										
D.GP	1540.34	- 19										
9015		-										
007		-										
DOT												
Ž												

[/	3/00			EXPL	ORATIO	N LOG			
				ST	ART DATE	= <u>+/(</u>	7/00								SHEET 3 OF 4
				E١	ND DATE	4/	1/00	 			-4		STATION	76+73 "P	1"
				JC	B DESCRI	PTION	1-000		xtensio	n Proje	UL		OFFSET	18.97 LT	
	2hr			LC	OCATION			Jounty, Nev	ada				ENGINEER	 CME 850	
	2 Mrd			BC	ORING		6+/3							Larson	
	Ą			E.,	A. #		79-01-5) \			NDWATER		DRILLING		
	le			GF	ROUND EL	EV15	59.34 (m)		4/7/00	NE		METHOD	HQ Core	
				HA	AMMER DR	ROP SYS		IA					BACKFILLED	_YesD	ATE <u>4/7/2000</u>
Ī	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DI	ESCRIPTION		REMARKS
		_													
		-													
		-													
	1538 3/	- 21													
	1550.54														
		-													
		_													
	1527.24	-													
	1557.54														
		-													
		-													
	1526.24										Shattered	zone at 22	.8 to 23.3 meter	S.	
	1550.54	23													
		-													
		-									Moderatel shallow to	y close to o moderate	close fractured, v dip angle.	with	
	1525.24	- 24										mederate	alp aligiot		
	1000.04	- 24													
		-									Shattered	zone at 24	4 to 25 meters.		
		-									C ilation o d	20110 01 2			
	153/ 3/	- 25													
	1004.04	- 20													
		-													
		-									Close to v	ery close f	ractured with mo	derate dip	
	1533 34	- 26									angle.			·	
	1000.04	20													
		-													
		-													
	1522.24	- 27									Shattered	zone at 26	.8 to 26.9 meter	S.	
	1552.54	- 21													Loss of
		-													circulation at
6		F													∠r.i meters - not regain by
5/11/	1521 24										Close to v	ery close fi	ractured, with m	oderate to	completion of
GDT	1001.04	- 20										angio.			100
DOT.C		-													
		-													
GPJ	1520.24	- 20													
015D.	1030.34	-29													
)620C		-													
Ď		F													
NV		-													

						1/4	8/00			EXPL	ORATION	N LOG			
				ST	TART DATE	4/0	7/00								SHEET 4 OF 4
				E	ND DATE	4/	1,00		vtonoio	n Droio	~ +		STATION	76+73 "P1	
				JC	B DESCRI	PTION	1-000			ii Fiojeo	JL		OFFSET	18.97 LT	
	200			LC	OCATION			Jounty, Nev	aua				ENGINEER	 CME 850	
	Twww.			BC	ORING		0+/3		r					Larson	
	a de la compañía de la			E.	A. #		79-01-5)				ELEVEL	DRILLING		
	2			GI	ROUND ELI	EV. 15	59.34 (1	m)	[4/7/00	NE		METHOD	HQ Core	
		\	N	HA	AMMER DR	OP SYS	STEMN	IA	l				BACKFILLED	Yes DA	TE _4/7/2000
	ELEV.	DEPTH	SA		BLOW CO 150 mm	DUNT Last	Percent	LAB TESTS	USCS		МАТЕ	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TIFE	Increments	300 mm	Recov'd		Gloup		Moderate	to high clay	content in frac	tures.	
		-										5 - 5			
										30.57					
		_													
	1528.34	—31													
		-													
	1527.34	-32													
		-													
		-													
	1526.34	-33													
		-													
		-													
	1525.34	34													
		_													
		-													
		-													
	1524.34	-35													
		_													
		-													
	4500.04	-													
	1523.34	- 30													
		-													
		-													
	1522.24	- 37													
	1022.34	- 31													
		-													
<u>(</u> 0		-													
5/11,	1521 34	-38													
GDT	1021.04														
DOT		-													
N		+													
.GPJ	1520 34	30													
015D.	1020.04	- 33													
6200		-													
TOC		-													
		_													

						11	/7/00			EXPLORATION LOG			
				ST	ART DATE	<u> </u>	/1/99						SHEET 1 OF 3
				E١	ND DATE		/10/99	 		n Droiset	STATION	77+22 "P1"	
				JC	B DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET	2.89 RT	
	- Day			LC	OCATION		ashoe (County, Nev	/ada		ENGINEER	Acker	
	2MM			BC	ORING	07	7+10		r		EQUIPMENT	Peterson	
	Ą			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	Ľ	1		GI	ROUND EL	EV15	59.24 (m)		11/10/99 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEMR	Rope - Cathe	ead		BACKFILLED	Yes DA	TE <u>11/12/1999</u>
	ELEV.	DEPTH	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION		REMARKS
	1558.24	- - - -								Moderately hard, wea to brown Metasedime sand infilling in fractu	athered, shatter entary Bedrock res.	ed, grey . Clayey	
	1557.24 ·	- - - - 2								Hard, moderately to I Metasedimentary Be	nighly fractured, drock .	dark grey	
		-											
	1556.24												
	1555.24	- 4 - -								4 88			
	1554.24									Hard, shattered to hig Metasedimentary Be	ghly fractured, d drock .	lark grey	
	1553.24 -	- - - -											
11/01	1552.24	- 7 - - -											
J NV_DOT.GDT 5/	1551.24	- 8 - - -											
NV_DOT 0079015D.GF	1550.24	- - - -											

						11	/7/00			EXPLORATION LOG			
				ST	TART DATE	11	/1/99						SHEET 2 OF 3
				El	ND DATE		/10/99		vtonoia	n Drojaat	STATION	77+22 "P1"	
				JC	DB DESCRI	PTION	1-580		xtensic	on Project	OFFSET	2.89 RT	
	-			LC	OCATION		ashoe (Jounty, Nev	ada		ENGINEER	Acker	
	2MM			BC	ORING		7+10				EQUIPMENT	Peterson	
	Z			E.	A. #	00	79-01-5)					
	Ž.	~		GI	ROUND EL	EV15	59.24 (m)		11/10/99 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEMR	lope - Cathe	ead		BACKFILLED	_Yes DA	TE
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group				
		-											
		_											
	1548.24	-11											
		-											
		_											
										Shattered zone with	clay infilling 0.7	meters	
	1547.24	-12								unox.			
		-											
		-											
		_											
	1546.24	-13											
		-											
		-											
		_											
	1545.24	-14											
		-											
		-											
	1544.24	- 15											
		-											
		-											
	1543.24	-16											
		-											
		-											
										16.76	المعام ويتعدد		
	1542.24	-17								Metasedimentary Be	а, аагк grey drock.		
		-											
		-											
1/01		Ĺ											
5/1	1541.24	-18											
.GDT		F											
DOT		F											
NN I		Ľ											
J.GP.	1540.24	-19											
3015L		F											
9700		-											
DOT		Ľ											
NN													

ĺ							11	/7/00			EXPLO	ORATIO	N LOG			
					ST	ART DATE		////99								SHEET 3 OF 3
					EN	ID DATE	11	/10/99						STATION	77+22 "P1'	
					JO	B DESCRI	PTION	1-580	Freeway E	xtensic	on Projec	t		OFFSET	2.89 RT	
					LC	CATION	W	ashoe (County, Nev	ada				ENGINEER	MG	
	Mu	COL.			BC	DRING	07	7+10		,				EQUIPMENT	Acker	
	- I				E./	A. #	00	79-01-5	5		GROU	NDWATER	LEVEL	OPERATOR	Peterson	
	in the second se				GF		= _{V.} 15	59.24 (m)		DATE	DEPTH m	ELEV. m	DRILLING METHOD	HQ Core	
					нд		OP SYS	STEM R	ope - Cathe	ead	11/10/99	NE			Yes DA	TE 11/12/1999
									•	'				DAGRITILLED	DA	IE
	ELEV.	DEPT	н	NO.	TYPE	150 mm	Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(11)	(11)		-		Increments	<u>300 mm</u>	Recovid			20.18					
		-														
		_														
	1538.24	-21														
		-														
		-														
		-														
		-														
	1537.24	-22														
		_														
		-														
	1536.24	-23														
		-														
		-														
	1535 24	-24														
	1000.24	- 24														
		-														
		-														
		-														
	1534.24	-25														
		-														
		_														
	1533.24	-26														
		-														
		-														
		-														
		-														
	1532.24	-27														
		_														
11/01		-														
Τ 5/*	1531.24	-28														
GD		-														
БQ		-														
Š		F														
GPJ	1520.04	1														
15D.	1530.24															
0670		F														
Т 0		-														
<u>_</u> DC		-														
ź																

							10	1/11/00			EXPLORATION LOG			
					S	TART DATE	<u> </u>	/1/00						SHEET 1 OF 3
					El	ND DATE		11/33	Freewoy F	vtonoia	n Project	STATION	77+79 "P1"	•
					JC	OB DESCRI	PTION	1-00U		xtensic		OFFSET		
	2**				LC	OCATION		asnue (Journey, INE	aua		ENGINEER	Acker	
	2 Mr. M	e	5		B	ORING		7+70	-	[Peterson	
	4 m				E.	A. #		19-01-5))		DATE DEPTH m ELEV m	DRILLING		
	20				G	ROUND EL	EV15	48.96 (<u>m)</u>		11/1/99 NE	METHOD	HQ Core	
)	777	1	H	AMMER DR	OP SYS	STEM	cope - Cath	ead		BACKFILLED	Yes DA	TE
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-									Soft, completely weat Metasedimentary Be Sandy Silt.	thered, green gi drock weathere	ey to grey d to	
	1547.96	- 												
		_												
		_												
	1546.96	-2												
			2.44											
		_	2 00	А	SPT	11 20 21	41		w, PI, Sv		Very soft and weathe medium plastic fines.	red to Sandy C	ay with	
	1545.96	-3	2.90			21								
		-												
		-												
		Ę	2.00								2.00			
	1544.96	-4	3.90			10					Hard, slightly weather	red, dark grey, l	nighly	
		-	4.42	В	SPT	10 18	28				fractured to shattered Bedrock	I, fine grained A	ndesite	
		_								-	Dearbox.			
		-												
	1543.96	-5												
			5 /0								5.40			
		-	0.40	С					w, PI, Sv		Hard, slightly weather	red, grey, shatte	ered	
		-									Andesite Bedrock.			
	1542.96	-6												
		-												
		-												
	1541.96	-7												
		_												
5		-									Poor recovery			
5/11/C		-									F OUT TECOVELY.			
DT (1540.96	-8												
DT.G		Ļ												
N		F												
1 L d E		-												
15D.(1539.96	-9												
06200		-												
OT C		F												
NV_C		-												

						10	0/11/00			EXPLORATION LOG	
				SI	ART DATE		/1/99			SHE	ET 2 OF 3
				E١	ND DATE		/1/99			STATION 77+79 "P1"	
				JC	B DESCRI	PTION	1-580	Freeway E	xtensic	OFFSET 28.70 RT	
	54			LC	OCATION			Jounty, Nev	ada	ENGINEER MG	
	2Wml			BC	ORING	07	7+70	_	[
	Z.			Ε.	A. #		079-01-5	<u>`</u>			
	te			GI	ROUND EL	EV15	48.96 (m)		11/1/9 NE METHOD HQ Core	
				HA	AMMER DR	OP SYS	STEM	cope - Cathe	ead	BACKFILLED Yes DATE 1	1/1/1999
	ELEV.	DEPTH	SAI	MPLE TYPE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DESCRIPTION REI	MARKS
	(11)	(11)			Increments	300 mm	Recova				
		-									
		-								Poor recovery.	
	1537.96	-11									
		-									
		-								Clay infilling in fractures.	
		-									
	1536.96	-12									
		-									
		-								Poor recovery.	
	4505.00	-									
	1535.96	-13									
		-									
		-									
	1534.96	- 14									
	1004.00	-									
		-									
		-									
	1533.96	- 15									
		-								15.20	
		-								Hard, slightly weathered, grey to dark grey,	
										highly fractured Andesite Bedrock . Shattered zone with clay infilling 0.3 meters	
	1532.96	-16								thick.	
		-									
	1531.96	-17									
		F									
		Ĺ									
11/01		F								Moderately fractured for 0.6 meters.	
JT 5/	1530.96	- 18									
DT.GL		Ľ									
V_DC		Ē									
NLA		F								18.90	
5D.G	1529.96	- 19								Highly fractured to shattered.	
7901		L									
<u>Т 00</u>		F									
V_DC		-									
z		1	1	I	l		L	I	1		

						. 10)/11/99			EXPLO	ORATIO	N LOG			
				S1		11	/1/00							77 70 "04"	SHEET 3 OF 3
				E	ND DATE		1,1,33	 Erooway E	vtoncio	n Proioc	~+		STATION	//+/9 "P1"	
				JC	DB DESCRI	PTION					<i></i>		OFFSET	_20.70 KT	
	- Am			LC	DCATION		7170		aua				ENGINEER	Acker	
	N. W.			BC	ORING		70 01 6		[CROU				Peterson	
	1 m			E.	A. #		19-01-C) m)	ŀ	DATE	DEPTH m	ELEVEL	DRILLING		
	1º			GI	ROUND ELI	EV	040.90 (III)		11/1/99	NE		METHOD		11/1/1000
				HA	AMMER DR	OP SYS	STEM	ope - Calin	eau				BACKFILLED	DA	TE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		-								20.27	Modorato	ly to highly	fractured with p		
											fractures.	ly to highly i			
		_													
	1527.96	-21													
		-													
										21.64					
		-									Highly fra	ctured with	minor clay infilli	ng.	
	1526.96	-22													
		-													
		_													
		-								22.86					
	1525.96	-23									Shattered washed m	shear zone nost of the c	e with clay infillir clay from fractur	ng. Drilling res.	
													,		
		-													
		-													
	1524.96	-24													
		_								24.54	Highly fra	ctured to sh	attered.		
		-									0,				
	1523.96	25													
		_													
		-													
	1522.96	-26													
											Small sha	ttered zone	with clay infillin	ng.	
		-													
		-													
	1521.96	-27													
		_													
5		-													
5/11/0		-													
DT (1520.96	28													
DT.G		L								28.35					
		F													
- Lag		-													
115D.(1519.96	29													
06200		-													
OT C		-													
		-													

						. <u>/</u> /	3/00			EXPLORATION LOG	
				ST	ART DATE	<u>,</u>	1/00			SHEET 1 OF	2
				EN	D DATE	-4/4	+/00	 	vtopoli	STATION 77+90 "P1"	
				JO	B DESCRI	PTION	1-580	Freeway E	xtensio	OFFSET 16.45 LI	
	l la			LO	CATION	VV	ashoe (County, Nev	vada	ENGINEER	
	Mu			BO	RING	07	7+90			EQUIPMENT CME 850	
	NA NA			E.A	A. #	00	79-01-5	5		GROUNDWATER LEVEL OPERATOR Larson	
	1 de la constante da la consta			GR		_{EV.} 15	69.94 (m)		DATE DEPTH m ELEV. m DRILLING HQ Core	
				нΔ			N	IA		A/4/00 NE BACKEILLED Yes DATE 4/4/2000	
								1			
	ELEV. (m)	DEPTH (m)	NO. TY	/PE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION REMARKS	
		0.00							CL	Very moist, soft, olive grey/green, Lean Clay	
		-	cc	ORE			71			Moderately hard to hard, variably fractured,	
		-								olive grey/green to blue grey, Metasedimentary Bedrock	
		- 0.85							-	Metascumentary Bearook	
	1568.94	+1 1 22	cc	ORE			83			Very close fractured, with brown clay fracture	
									1	ming.	
			cc	DRE			85				
		1.83									
	1567.94 ·	-2	CC C)BE			67			Shattered, with minor fracture filling.	
		- 2.29					07				
		-					67				
		2.74					07			2.68	
		-							CL	Moist, very soft to soft, pale white to yellow	
	1566.94	-3	CC	DRE			65			Moderately hard to hard, variably fractured,	
		- 3.20							-	olive grey/green to blue grey, Metasedimentary Bedrock	
			cc	ORE			60			Shattered with minor fracture filling.	
		- 3.87									
	1565.94 ·	4 4 11	CC	DRE			50				
		-					40		-		
		- 4.50					40			Very close fractured.	
		-	cc	DRE			69			Shattered.	
	4504.04	4.94							1	Close to very close fractured, with moderate to	
	1564.94	5 5.12	CC	DRE			100		-	steep dip angle, very minor to no fracture filling.	
		5.39	CC	DRE			100		1		
		_	cc	ORE			38				
		5.79							-		
	1563.94 ·	6 6.10	CC	JRE			90		1		
		6.32	CC	DRE			53		1		
		F	CC	DRF			100				
		6.77							4		
	1562.94	6.93	CC	JRE			70		+		
		7.16	- cc	DRE			65		-	Minor to moderate fracture filling.	
		- 7.47	cc	RE			75				
Σ		-					100			No fracture filling	
/11/0		7.92					100				
DT 5	1561.94	<u>8 8.05</u>)RE			75 67		-		
JT.GL		- 0.23					07		-	Very close fractured to shattered.	
00		Ľ	cc	DRE			25				
٦ N		8.84									
O.GP.	1560.94	-9	cc	DRE			70		1		
015C		9.14)B E			80		+	Close fractured with steep dip angle, minor clay	
1670C		9.36					45		-	fracture filling.	
ot		9.69	CC	JRE			45		_	Very close fractured to shattered, with minor to moderate fracture filling	
آ ر		10.00	cc	DRE			70				
z		10.00	1			L	l	I	1		

						/۱	3/00			EXPLO	ORATIO	N LOG		
				ST	FART DATE	<u> </u>	4/00							SHEET 2 OF 2
				E١	ND DATE	4/4	4/00			. Durin			STATION	P1"
				JC	DB DESCRI	PTION	1-580		xtensic	n Projec	7		OFFSET 16.45 L	l
	204			LC	OCATION		ashoe (County, Nev	ada				ENGINEER	
	2MM	613		BC	DRING		7+90		r				EQUIPMENT CIVIL OC	
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROU	NDWATER			
	ž			GI	ROUND EL	EV15	69.94 (m)		4/4/00	NE	ELEV. M	METHOD HQ Cor	e
)		HA	AMMER DR	OP SYS		IA	[BACKFILLED Yes	DATE
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION	REMARKS
		- 40.00		CORE			95							
		10.36		CORE			80		-					
		- 10.67							-					
	1558.94	<u>111.00</u>		CORE			95		-					
		11.34		CORE			55		_					
		-		CORE			100							
	1557.94	- 11.89							-		Close frac	tured with	shallow to steep dip angle.	
		-												
		-		CORE			88				., .			
		-									Very close clay.	e fractured	to shattered with minor	Loss of circulation from
	1556.94	-1313 11								13 11	,			12.5 to 12.8
		-								15.11	Moist, sof	t, yellow br	own to olive brown, Lean	Ineters.
		-		CORE			45		CL		Clay with	Gravel		
		13.81								13.72	Llord you	, alaga frag	tured to chattared blue	
	1555.94	-14									grey, Met	asedimenta	ary Bedrock with minor to	
		-		CORE			60				moderate	clay fractu	re filling.	
		- 14.54												
		-		CORE			90							
	1554.94	14.94		CORF			80		-					
		-							1					
		-		CORE			37							
		-												
	1553.94	15.91		CORE			100		-					
		16.15			1		100		-					
		-		CORE			40							
		16.76							-					
	1552.94	-1717.07		CORE			71			17.07				
		-												
		-												
/01		-												
5/11	1551 94	-18												
GDT	1001.01	-												
DOT.		-												
N		-												
GPJ	1550 94	- 19												
015D		-												
0079		-												
TOC		-												
		-												

						4/9	₽/ <u>∩</u> ∩			EXPLORATION LOG			
				ST	FART DATE	4/0	0/00						SHEET 1 OF 2
				E١	ND DATE	4/	9/00			n Davis st	STATION	78+38 "P1	"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET	0.11 LI	
	-			LC	OCATION		ashoe (County, Nev	ada		ENGINEER		
	2MM			BC	ORING	07	8+38				EQUIPMENT		
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	n de la companya de la company Na companya de la comp			GI	ROUND EL	EV15	69.33 (m)		4/9/00 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEMN	IA			BACKFILLED	_YesDA	TE4/9/2000
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	ELEV. (m) 1568.33 - 1567.33 - 1566.33 - 1566.33 -	DEPTH (m)	SAI NO.	<u>TYPE</u>	BLOW Ct 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	SC	Material de Moist, medium dense green-brown Clayey 3 estimated 20-30% mu 40-50% fine to coarse coarse gravel. Varial Basalt boulder from 2	SCRIPTION a, dark brown to Sand with Grav edium plasticity e sand, and 30- ole unit.	el with fines, 40% fine to	REMARKS
	1563.33 · 1562.33 ·	- - - - - - - - - - - - - - -								6.10 Soft to moderately ha moderately weathere Metasediments. Mod formation along fractu Heavy FeOx staining	ard, highly fractu d, gray-green derately to heav ures. from 6.1m to 6	ıred, ıy clay .8m.	
.GPJ NV_DOT.GDT 5/11/01	1561.33	- - - - -											
NV_DOT 0079015D.	100.33	- - -											

						4/	3/00			EXPL	ORATIO	N LOG			
				ST	ART DATE		2/00								SHEET 2 OF 2
				E١	ND DATE	4/3	5/00	 	vtonoio	n Draia			STATION	78+38 "P1	
				JC	B DESCRI	PTION	00C-I			n Projec	л		OFFSET	0.11 LI	
	- Am			LC	OCATION			Jounty, Nev	aua				ENGINEER	CME 850	
	2 Mm			BC	DRING		8+38		r					Larson	
	The second			E./	A. #		00.00.0)					DRILLING	110.0	
	1ª			GF	ROUND EL	EV15	69.33 (<u>m)</u>	— [4/9/00	NE		METHOD	HQ Core	
			N	HA	AMMER DR	OP SYS		IA	L				BACKFILLED	Yes DA	TE 4/9/2000
	ELEV.	DEPTH	SAN	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)			Increments	<u>300 mm</u>	Recov'd		Cicup						
		-													
		-													
	1558.33 -	-11													
		_													
		-													
		-													
	1557.33 -	-12													
		-									Poor reco	very from 1	2.5m to 14.0m.		
		-													
	1556.33 -	-13													
		-													
		-													
	4555.00	-													
	1555.33	- 14									Slight to h	eavy FeOx	staining on frac	ctures from	
		-									14.0m to	15.5M.			
		-													
	155/ 33 -	- 15													
	1004.00	-													
		-								15.54					
		-													
	1553 33 -	-16													
	1000.00	-													
		-													
		_													
	1552.33 -	-17													
		-													
		-													
1/01															
- 5/11	1551.33 -	-18													
LGD.		-													
		-													
N		F													
D.GP	1550.33 -	- 19													
9015		-													
T 007		È													
ГО Д		_													
≥															

						1/	5/00			EXPLORATION LOG					
				ST	TART DATE	E	11/00						SHEET 1 OF 7		
				E١	ND DATE		11/99			n Ducie et	STATION	78+49 "P1"			
				JC	DB DESCR	IPTION	1-580	Freeway E	xtensic	n Project	OFFSET	<u>11.59 RT</u>			
				LC	OCATION	W	ashoe (County, Nev	/ada		ENGINEER	MG			
	M			BC	ORING	07	8+40		r		EQUIPMENT	Acker			
	The second			E.	A. #	00	79-01-8	5		GROUNDWATER LEVEL	OPERATOR	Peterson			
	ž			GI	ROUND EL	_{EV.} 15	68.88 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core			
				ни				ope - Cath	ead	1/11/99 NE		Yes DAT	F 1/11/1999		
				11/					I	I	BACKITELED	DAT	L		
	ELEV.	DEPTH	NO		150 mm	Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS		
	(m)	(m))		Increments 13	300 mm	Recov'd		Cioup	Moist, dense, brown	Silty Gravelly S	and			
		- 0.00	A	SPT	18	37		w, PI, Sv		10-20% non-plastic fi	nes, 70-90% fin	e to coarse			
		- 0.46	6		19				-	sand, 0-20% gravel.	Cobbles compris	se up to			
		-								1070 01 3011 11/233.					
	1567.99														
	1307.00 -	['													
		L													
		L													
		L													
	1566.88 -	+2 2 13	3												
			-		6				1						
		- 2.50	В	SPT	6	19		w, PI, Sv							
		2.58	,		13				-						
		-													
	1565.88 -	-3													
		-													
		- 3.51			9				-						
			С	SPT	10	23		w, PI, Sv,							
	1564.88 -	3.96	6		13			511	SM						
	100 1100	-													
		-	_												
		4.57	D					w, PI, Sv	-						
		-													
	1563.88 -	- <u>5 ^{5.03}</u>	3		8				-						
		-	Е	SPT	15	35									
		- 5.49)		20				-						
		-													
	1562.00														
	1302.88 -	-0 6.10	' F					w, PI, Sv	-						
		6.55			15				-						
		F	G	SPT	29	50/127									
	1561.88 -	7 7.01			50/127				-						
		-													
		-													
10		7.62	H					w, PI, Sv	+	7.77					
5/11/		7.92	2							Soft, completely wear	thered, highly fra	actured,			
μ	1560.88 -	-8	1	SPT	21	74		w, PI, Sv,		variable colored (tan,	olive green, blu	le)			
JT.G		8.38	3		44	/ +		Sh, C		altered to medium to	high plastic cla	/ material.			
_DC															
З		L													
.GP	1559.88 -	-9 ~ · ·													
015D		9.14	K					w, PI, Sv	-						
079(_ 9.45	5												
DT C		0.75	J	SPT	27 50	50									
		9.75	1						1						
ź															
						1/	5/00			EXPL	ORATIO	N LOG			
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				S	TART DATE	= <u>1/3</u>	11/00							70 40 10 11	SHEET 2 OF 7
				El	ND DATE		11/33 1-200		vtencia	n Proio	~ t		STATION .	78+49 "P1"	
				JC	OB DESCRI	IPTION	1-500			пгюје	JL		OFFSET -	MG	
	- An-			LC	DCATION		20140	Journy, Nev	aua				ENGINEER -	Acker	
	K.			B	ORING		0740			CROU				Peterson	
	1 m			E.	.A. #) m)		DATE		ELEVEL	DRILLING		
	le			G	ROUND EL	EV	00.00 (III) Pana Cath		1/11/99	NE		METHOD _		1/11/1000
				H	AMMER DF	ROP SYS	STEM	tope - Cathe	eau				BACKFILLED _	DAT	E
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	1557.88 -	- - - - - - - - - - - - - - - - - - -	L	SPT	21 24 44	68			-						
	1556.88	- - 									Bedrock is alteration.	s slightly ha	arder with less cla	ay	
		- 12.50									Color cha	nge to gree	n-blue.		
		- 40.00	м	SPT	36	50/102			1						
		12.80			50/102				-						
	1555.88	- 13													
		_													
		-													
	4554.00	-									Slightly ha	ard and sha	ttered.		
	1554.88	14.17	Ν	SPT	50/0	50/0									
	1553.88	- - 								14.63	Moderate fractured Metasedin	ly hard to ha to shattered mentary Be	ard, weathered, ł ł, blue grey to gr drock .	highly ey	
	1552.88	- - - - -									Fractures	occur on 5	-10 cm. spacing.		
	1551.88	- 17													
DT 5/11/01	1550.88										Very thin weathered	clay infilling d bedrock.	. Small zones of	ⁱ highly	
NV_DOT.G		_									Zone 0.3 shattered high plast	meters thick , green to g ic clay infilli	κ οτ nignly weath reen-grey bedroo ng.	ierea, ck with	
0079015D.GF	1549.88	- - -									Abundant	clay fractu	re infilling.		
NV_DOT		_													

						1/	E/00			EXPLORATI	ON LOG			
				ST	FART DATE	<u> </u>	5/99							SHEET 3 OF 7
				E	ND DATE	1/	11/99			5		STATION	78+49 "P1"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Project		OFFSET	<u>11.59 RT</u>	
	Day.			LC	OCATION	W	ashoe (County, Nev	vada			ENGINEER	MG	
	Ma	D L		BC	ORING	07	'8+40		r			EQUIPMENT	Acker	
	Ä			E.	A. #	00)79-01-5	5		GROUNDWAT		OPERATOR	Feleison	
	i i			GI	ROUND EL	_{EV.} _15	68.88 (m)		DATE DEPTH	m ELEV. m	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM_R	Rope - Cathe	ead			BACKFILLED	_Yes	TE 1/11/1999
		DEDTU	SAI	MPLE	BLOW CO	DUNT			11000				_	
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MA	TERIAL D	ESCRIPTION		REMARKS
		-								Less cla	av infillina.			
		-									.,			
		-												
		-												
	1547.88 -	-21												
		-												
		-												
	1546.88 -	-22												
		-												
		_												
	1545.88 -	-23												
		-												
		-												
	1544.88 -	-24												
		-												
		-												
	1543.88 -	-25												
		-												
		-								Modera	tely to highly	fractured with n	noderate	
		-								ciay infi	lling.			
	15/2 99	26												
	1042.00 -	- 20												
		F												
		-												
		- -								Modera	tely to hiahlv	fractured with p	referred	
	1541.88 -	27								orientat	ions at 45, 60) & 85 degrees	with clay	
		Ļ								in mining	io o mm.			
÷		F												
/11/0		F												
DT 5	1540.88 -	-28												
DT.G		Ľ												
Z_D		F												
N N		-												
5D.G	1539.88 -	-29												
79015		F												
T 007		Ĺ												
		_												
N														

						1/	5/00			EXPLORATION LOG			
				S	FART DATE	1/	11/00						SHEET 4 OF 7
				E	ND DATE		1 500		vtonoio	n Drojaat	STATION	78+49 "P1	
				JC	DB DESCRI	PTION	1-000				OFFSET	MG	
	- Arr			LC	DCATION			Journy, Nev	aua		ENGINEER	Acker	
	WWW B			BC	DRING		0+40	-				Peterson	
	1 m			E.	A. #		019-01-0)		DATE DEPTH m ELEVEL	DRILLING		
	Ve			GI	ROUND EL	EV15	68.88 (m)		1/11/99 NE	METHOD	HQ Core	4/44/4000
			N	HA	AMMER DR	OP SYS		tope - Cathe			BACKFILLED	YesDA	TE
	ELEV.	DEPTH	SA		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd		Cloup				
		-											
	1537.88	-31											
		-											
		-											
	1536.88	-32											
		-											
		_											
	1535.88	-33											
		-											
		-											
	1534.88	-34											
		-											
		-											
	1533.88	- 35											
		-											
		_											
	1532.88	-36											
		-											
		-								Slightly to moderately no clay infilling.	/ fractured for 0.	.8 meters -	
	1531.88	-37											
		-											
11/01		-											
T 5/	1530.88	-38											
T.GD		F											
<_DC		Ę											
N Lc		F											
5D.GF	1529.88	-39											
79015		F											
T 00.		Ē											
DO_		F											
ź													

						1/	5/00			EXPLORATION LOG		
				ST	FART DATE	1/	11/00					SHEET 5 OF 7
				E	ND DATE		1.580	Ereeway E	vtonsio	n Project	STATION	1"
				JC	DB DESCRI	PTION	2500-1-000		vada		OFFSET MG	
	14			LC	DCATION	07	asilue (Journy, Nev	aua		ENGINEER Acker	
	Kur			BC	ORING		70_01_5	:	[OPERATOR Peterson	
	1 miles			E.	A. #	15	68 88 (, m)		DATE DEPTH m ELEV. m	DRILLING HO Core	
	Ve			GI	ROUND EL	EV	D 00.000	one - Cath		1/11/99 NE	METHOD <u>Notice</u>	1/11/1000
				HA	AMMER DR	OP SYS			au [BACKFILLED D	ATE
	ELEV. (m)	DEPTH (m)	NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	REMARKS
		-								Moderately fractured	with moderate clay infilling	
		-										
		_								Highly fractured.		
	1527.88	-41										
		-										
		-										
	1526.88	-42										
		-										
		-								Alexandra ta la cita Cillar		
		_								Abundant clay Infilling	J.	
	1525.88	-43										
		-										
		-										
		_										
	1524.88	-44										
		-										
		-										
	1523.88	-45										
		-										
		-										
	1522.88	-46										
		-										
		-								Moderately to highly	fractured with moderate	
										clay infilling. Fracture	orientations mainly	
	1521.88	-47								between 45-90 degre	es.	
		-										
1/01												
T 5/1	1520.88	-48										
T.GD		-										
.00_/												
∧N Γ		L										
D.GP	1519.88	-49										
79015		-										
T 007		L										
DO		L										
Σ												

						1/	5/00			EXPLORATION LOG			
				ST	ART DATE	1/	11/00						SHEET 6 OF 7
				E١	ND DATE		11/99	 		n Ducie et	STATION	78+49 "P1"	
				JC	B DESCRI	PTION	1-580		xtensio	on Project	OFFSET	11.59 RT	
	34			LC	OCATION		ashoe (Jounty, Nev	ada		ENGINEER	Ackor	
	2MM			BC	ORING		8+40				EQUIPMENT	Peterson	
	Z			Ε.	A. #	0	079-01-5)					
	Ž.	~		GI	ROUND EL	EV15	68.88 (m)		1/11/99 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	_YesDA	TE <u>1/11/1999</u>
	ELEV.	DEPTH	SA		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	140.		Increments	<u>300 mm</u>	Recov'd		Gloup				
		-											
										Highly fractured with	abundant clav i	nfilling	
		_											
	1517.88	-51											
		-											
		_											
	1516.88	-52											
		-											
		_								Fractures at 60 degre	es		
	1515.88	-53											
		-											
										Highly fractured with	thin clay infilling].	
	1514.88									Fractures dominant a	t 35 dearees.		
		-									0		
		_								Shattered zone 0.3 m	eters thick.		
	1513.88	-55											
		-											
										Shattered zone 0.1 m	eters thick.		
		_											
	1512.88	-56								Shattered zone 0.6 m	eters thick.		
		-											
		Ľ											
		L								Highly fractured.			
	1511.88 ·	-57											
		-											
11/01		F											
T 5/	1510.88	-58											
T.GD		-											
V_DC													
N L		F								Fractures at 65 degree	es with thin cla	y infilling.	
5D.GF	1509.88	-59											
7901		Ľ								Shattered zone 0.1 m	eters thick		
T 00		F											
V_DC		-								Shattered zone 0.3 m	eters thick. Thi	n clay	
z		1	1	1			1						

						1/	5/00			EXPLO	ORATIO	N LOG			
				ST	FART DATE	1/3	11/00								SHEET 7 OF 7
				E١	ND DATE	1/	11/99	 		n Draiae			STATION	78+49 "P1"	
				JC	DB DESCRI	PTION	1-060		xtensio	n Projec	1		OFFSET	<u>11.59 RT</u>	
	204			LC	DCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			BC	ORING		8+40		r]		Peterson	
	- A			Ε.	A. #		79-01-5) \					DRILLING		
	V			GI	ROUND EL	EV15	68.88 (m)	<u> </u>	1/11/99	NE		METHOD	HQ Core	
			N	HA	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead				BACKFILLED	Yes DA	TE <u>1/11/1999</u>
Ī	ELEV.	DEPTH	SAN		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		МАТ	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group		infilling.				
		-													
		-								60.06					
	1507.88 -	-61								00.90					
		-													
		-													
		-													
	1506.88 -	-62													
		-													
		-													
	1505.88 -	-63													
		-													
		-													
	1504.88 -	-64													
		-													
		-													
		-													
	1503.88 -	- 65													
		-													
		-													
	4500.00	-													
	1502.88 -	- 66													
		-													
		-													
	1501.88 -	- 67													
	1301.00	- 07													
		-													
/01		-													
5/11,	1500.88 -	- 68													
GDT	1000.00	- 00													
DOT.		-													
N		F													
.GPJ	1499.88 -	-69													
)015E		-													
0075		-													
DOT		Ľ													
N		-													

							_ 10)/0/00			EXPLORATION LOG			
					ST		=)/10/00					70.00 "04"	SHEET 1 OF 3
					E١			1_520		vtenci	n Project	STATION	/8+82 "P1"	
					JC	DB DESCRI	IPTION			vada		OFFSET	MG	
	an a	ilu.			LC	DCATION		78+70		aud			Acker	
	× N)		BC	DRING		170_01_4	5				Peterson	
	1 miles				E.,	A. #	16	560 /7 (5 m)		DATE DEPTH m ELEV. m	DRILLING		
	l le				GI	ROUND EL	EV	509.47 (nn) 2009 - Cath		10/10/99 NE	METHOD		10/10/1000
			V/		HA	AMMER DF	ROP SYS	STEM	tope - Calin	eau		BACKFILLED	DAT	E
	ELEV. (m)	DEPT (m)		SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-									Moist, dense to very o Gravelly Sand with e: fines, variable sand a Cobbles to 8 in. diam boulders.	dense, brown S stimated 20% n nd gravel perce eter. Surface co	ilty on-plastic intage. obbles and	
	1568.47	+1												
		- - 1. -	.52	A					w, Pl, Sv	_	Lost circulation.			
	1567.47	-2												
		-												
		_ 2.	.44			9				-				
			00	В	SPT	15	28							
	1566.47	-3	.90			13				SM				
		-												
		-												
		3	.81											
	1565.47	3.	.96	С	SPT	50/127	50/127			-				
		-												
		-												
		-												
	1564.47	-5												
	100 11 11	-												
		- 5	.49	_	ODT	50/111	50/111			4				
		_ 5	.64 .79		SPI	50/114	50/114			-	5.79			
	1563 47	-6		E					W, PI, SV		Soft, highly to comple	tely weathered	, olive to	
	1000.11	-									Bedrock.	lured wetasedin	nentary	
		-												
		-												
	1562.47	-7												
	1502.47	-												
		-												
01		-												
5/11/	4504 47	-												
3DT	1561.47	_×												
DT.C		- R	.53											
NV_L		- 8	.69	F	SPT	50/140	50/140							
GPJ	4500	+												
15D.(1560.47	9 9.	.14	G					w, PI, Sv	-				
0620		-												
OT 0		F												
		-												
_														

ſ						10				EXPLORATION LOG			
				ST	FART DATE		/9/99						SHEET 2 OF 3
				E١	ND DATE	10	/10/99				STATION	78+82 "P1	1
				JC	B DESCRI	PTION	I-580	Freeway E	xtensic	n Project	OFFSET	_33.40 RT	
				LC	OCATION	W	ashoe (County, Nev	ada		ENGINEER	MG	
	Muz			BC	ORING	07	8+70				EQUIPMENT	Acker	
	MAL	(E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	i.			 GI		_{EV} 15	69.47 (m)		DATE DEPTH m ELEV. m		HQ Core	
				ы Ц				ope - Cathe	ead	10/10/99 NE	BACKELLED	Yes DA	те 10/10/1999
									I		BACKFILLED	DA	
	ELEV.	DEPTH	NO		150 mm	Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
╞	(m)	(m)			Increments	300 mm	Recov'd		Cioup				
		-											
		-											
	1558.47 -	-11											
		-											
		-											
		-											
		-											
	1557.47 -	- 12											
		L								Completely weathered	d, tan - olive gre	en, low	
		_								1 meter thick.			
		-											
	1556.47 -	-13											
		-											
		Ľ											
		_											
	1555.47 -	- 14											
		-								14.33			
		-								Hard, dark grey, highl	y fractured, wea	athered,	
										commonly at 30 to 40	degrees.	luies	
	1554 47 -	- 15											
		-											
		-											
		-											
	1553.47 -	16											
		L											
		_								Clay seam 0.3 meters	s thick.		
		-											
	1552.47 -	-17											
		Ľ											
		_											
11/01		F											
T 5/·	1551.47 -	- 18											
T.GD		-											
DO		-											
N		Ľ											
.GPJ	1550 47 -	- 19											
015D		ļ."											
0079		F											
D		F											
NV		_											

Ĩ						10	1/0/00			EXPLO	DRATIO	N LOG			
				ST	FART DATE	10	/10/00								SHEET 3 OF 3
				E١	ND DATE		10/99	 					STATION	78+82 "P1	"
				JC	DB DESCRI	PTION	006-1			n Projec	1		OFFSET	33.40 RT	
	24			LC	DCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			BC	ORING	07	8+70	_	r				EQUIPMENT	Peterson	
	A.			Ε.	A. #		079-01-5	<u>,</u>				ELEVEL	DRILLING		
	2u			GI	ROUND EL	EV15	69.47 (m)	ŀ	10/10/99	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM	cope - Cathe	ead				BACKFILLED	Yes DA	ATE 10/10/1999
	ELEV.	DEPTH	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	()				Increments	300 mm	Recova				Shattered	fault or lan	dslide zone 0.3	meters	
		-									tnick.				
		-													
	1510 17	-													
	1548.47 -	- 21													
		-									Thin clay	seam.			
		-													
	1547 47	-													
	1047.47										I hin clay	seam.			
		-													
		-													
	1546.47 -	-23													
		-													
		-													
		Ľ													
	1545.47 -	-24													
		-													
		-													
	1544.47 -	25													
		-													
		Ľ													
	1543.47 -	-26									Zones of	slightly wea	thered, modera	tely	
		-									fractured	bedrock.			
		-													
	1542.47 -	-27													
		-													
		_													
11/01		-													
DT 5/	1541.47 -	-28													
DT.GI		Ĺ													
N_D(-													
N L		-													
5D.G	1540.47 -	-29													
02901															
DT 0		F								29.72					
N_D		+													
<u>~</u>															

						1/1	1/00			EXPL	ORATIO	N LOG			
				ST	ART DATE	= <u>4/</u>	2/00								SHEET 1 OF 3
				EN	ND DATE	4/3		 Eroowov E	vtonoir	n Droio	ot		STATION	78+74 "P1"	
				JC	B DESCRI	IPTION	1-000			JII FIOJE	J		OFFSET	17.99 LT	
	500			LC	OCATION			Jounty, Nev	ada				ENGINEER	 CME 850	
	2Wml			BC	ORING		8+74						EQUIPMENT	Larson	
	A.			E./	A. #		/9-01-5)				ELEVEL	DRILLING		
	2e			GF	ROUND EL	EV15	86.77 (m)		4/3/00	NE		METHOD	HQ Core	
		\		HA	AMMER DR	ROP SYS	TEM	A					BACKFILLED	YesDA ⁻	re <u>4/4/2000</u>
	ELEV. (m)	DEPTH (m)	SAN NO.	/IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		0.00									Moist to s Sandy Le	lightly mois an Clay wit	t, soft to very st h Gravel repres	iff, brown, sents	
				CORE			75		CL		bedrock.	y weathere	u metaseuimen	lary	
		-								0.91					
	1585.77	+1									Moderate	y hard to h	ard, variably fra	ctured,	
									-		Very close	e fractured	to shattered.	n i i i i i i i i i i i i i i i i i i i	
		_									Clav sean	n - moist, v	erv stiff, olive br	own.	
		-									Close to v	ioni alaaa fi	contured with m	odoroto to	
	1584.77	-2		CORE			100				steep dip	angle (35-8	85 deg.) Very m	inor to	
											moderate	clay fractu	re filling.		
		274													
		-		COPE			100		-						
	1583.77	3 3.11					100		-						
		- 3.51	0	CORE			100		_						
		- 3.90	e e	CORE			100								
	1582.77	4 4.15	0	CORE			100]						
		4.45	0	CORE			100								
		- 4.72	0	CORE			100								
	1581 77	- 5													
	1001.77	Ļ	0	CORE			100								
		- 5.49							4						
		-		CORE			100								
	1580.77	6.04							_						
		-													
		-		CORE			100								
		6.71							4						
	1579.77	- 7					100								
		-		UUKE			100								
		- 7.47							4						
1/01				CODE			100								
T 5/1	1578.77	-8		CORE			100								
T.GD		_ 8.23							-						
DO_															
NN F		F		COPP			100								
D.GF	1577.77	-9					100								
79015		-													
T 007		- 9.40							-						
, DO		-		CORE			100								
Ž		10.00													

						1/-	1/00			EXPL	ORATIO	N LOG			
				ST	ART DATE	<u> </u>	2/00								SHEET 2 OF 3
				E١	ND DATE	_4/、	3/00	 			-4		STATION	78+74 "P	1"
				JC	B DESCRI	PTION	1-580	Freeway E	xtensio	on Proje	Ct		OFFSET	17.99 LT	
	- An-			LC	CATION		ashoe (County, Nev	ada				ENGINEER		
	2MM			BC	DRING	07	8+74			[EQUIPMENT		
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROU	NDWATER				
	n.	A		GF	ROUND EL	_{EV.} _15	86.77 (m)		4/3/00	NE	ELEV. M	METHOD	HQ Core	
				HA	AMMER DR	ROP SYS	TEM_N	IA					BACKFILLED	_YesD	ATE <u>4/4/2000</u>
	ELEV.	DEPTH	SAN	IPLE	BLOW CO	OUNT	Percent	LAB TESTS	USCS		ΜΔΤΙ		FSCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group						
		10.36		CORE			100								
							60				Very close	e fractured	to shattered, wit	th moderate	
		10.82		CORL			00				angle.	ire ming a		steep alp	
	1575.77 -	-11 _{11.13}													
		_													
				CORE			80								
		- 11.89													
	1574.77 -	-12									Close to v	ery close f	ractured, with m	oderate to	
		-		CORE			100				steep dip	angle, very	/ minor fracture	rilling.	
				OONL			100								
		12.80							-						
	1573.77 -	-13		CORE			100								
		13.41		OOKL			100								
				CORE			95								
		13.81					30		-		White clay	/ fracture fi	illing at 13.7 met	ters.	Loss of
	1572.77 -	-14 14 17		CORE			83				-		U U		circulation from
									-						meters.
				CORE			100								
		14.94													
	1571.77 -	- 1515.03		CORE			100		-						
				0005			400								
		_		CORE			100								
		_ 15.85							-						
	1570.77 -	- 16		CORE			90								circulation from
		- 16.46		OOKL			50								15.8 to 18.6
		16.76		CORE			80		-						
		- 10.76							-						
	1569.77 -	-17		CORE			80								
		17.45													
+		_													
/11/0		17 98		CORE			80								
DT 5	1568.77 -	-18							-						
OT.G															
ĺ ≥		F		CORE			100				Close to n	oderatoly	close fractured	with	Loss of
A L4		F									shallow di	p angle.	GUSE HACIUIED	VVILII	Circulation from
15D.G	1567.77 -														18.6 to 20.1 meters.
0620		_		005			105]						-
0 LC		19 75		CORE			100								
		19.99		CORE			90		1						
Z		.0.00				1	1	1	1						1

					_ <u>/</u>	1/00			EXPL	ORATIO	N LOG			
			5	START DATE	= <u></u> /	3/00								SHEET 3 OF 3
			E	ND DATE	4/.	1 500	 Eroowov E	vtonoic	n Droio	~ +		STATION	78+74 "P1"	·
			J	OB DESCRI		1-500			ii Fioje	JL		OFFSET	17.99 LT	
	- Sher		L	OCATION			Journey, Nev	aua				ENGINEER	CME 850	
	S.M.M.		E	BORING		0+/4	-	[Larson	
	4		E	.A. #		079-01-5	<u>,</u>					DRILLING		
	Ĩ.		0	GROUND EL	EV. 15	86.77 (m)		4/3/00	NE		METHOD	HQ Core	
			F F	IAMMER DF	ROP SYS	STEM	IA					BACKFILLED	Yes DA	TE <u>4/4/2000</u>
	ELEV.	DEPTH	SAMPLE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(11)	-	COR	E	<u>300 mm</u>	100								
		20.42						_		Ch atta va d		4 to 00 7 moto		
		-	COR	F		100				Shalleleu	2011ë at 20	.4 10 20.7 Mete	15.	
	1565 77	21.03]		100								
	1505.77							1		Close to v	very close fr	actured with ste	eep dip	
		_	COR	F		80				angle with	n minor to m	noderate fractur	e filling.	
		-		7		00								
	4504 77	- 21.88						-						
	1564.77 -	22	COR	Ę		50								
		- 22.56	COR	E		0		-						
			COR	F				_						
	4500 77	- 22.86	COR					-						
	1563.77 -	-2323.10						-						
		- 23.47	COR	E										
		_												
	1560 77	-	COR	E										
	1302.77	- 2424.00						-						
		-	COR	E										
		- 24.69						_						
	1561 77	- 25	COR	F										
	1301.77	25												
		-												
		-	COR	Ę										
	1560 77	25.91						_						
	1500.77	20	COR	E										
		20.33						-						
		-	COR	F		95								
	1550 77	- 27				00								
	1559.77	2/27.13						-						
		_								\/		91 - J		
01		-								to 28.5 m	material, dr eters - No r	ecovery. Possik	ole void or	
5/11/	4550 77	-	COR	E		0				abandone	ed mine wor	kings.		
BDT	1558.77 -	-28												
DOT.0		28.44												
NV_		-	COR	E		0								
GPJ		28.96				Ŭ			28.96					
15D.	1557.77 -	- 29												
06700		-												
ŎT (-												
D_D														

							_ 1/	12/99			EXPLORATION LOG			
					S	TART DATE	= <u> </u>	12/00						SHEET 1 OF 1
					E	ND DATE	1/	13/99		vtonoic	n Drojaat	STATION	6+65 "P1"	
		/			J	OB DESCR	IPTION	1-000				OFFSET	3.14 KT	
	2m				L	OCATION		20.50	county, Nev	aua			cker	
	S. Way				E	ORING		9+50				OPERATOR P	eterson	
	4				E	.A. #		79-01-	C (ma)		DATE DEPTH m ELEVEL	DRILLING	0.0010	
	2				G	ROUND EL	EV15	572.51 (<u>m)</u>		1/13/99 NE	METHOD H	Q Core	4/40/4000
					F	IAMMER DF	ROP SYS	STEM	kope - Cath	ead		BACKFILLED	es date	
	ELEV. (m)	0	DEPTH (m)	SA NO	MPLE	BLOW C 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	()		0.00	A c		Increments		TRECOV G	w, PI, Sv		Soft to moderately ha	ard, weathered to high	ghly	
											Metasedimentary Be	ctured, brown grey		
		-												
		-									Soft clay seam 5 cm.	thick.		
	1571.51	T	1								Completely weathere	d.		
		Ļ	1.53	2										
		-	1.02	B					w, PI, Sv	1				
		-												
	1570.51	T	2								2.13			
											grey Metasedimental	red, highly fractured r y Bedrock . Fracture	a, dark e	
		-									spacing 5-10 cm. at 2	20 degrees.		
		-		_										
	1569.51	F	3 3.05	° C						-	Fracture at 50 degree	es with thin clay infil	ling.	
			3.51	1									0	
		-	0.0	Đ						1	Fracture at 65 degree	es with 2.5 cm. clay		
		-									infilling.			
	1568.51	E	4 4.1′	¹ E	-					-				
		-	4.57	F						-	Highly fractured with	thin clav infilling.		
		-									Shattered zone 0.5 m	neters thick.		
	1567.51	T	5 5.18	3 6										
		-												
		-	5 70	2										
		-	- 5.73	H						1	Clay seam 2.5 cm thi	ck.		
	1566.51	F	6 6.1(6.10			
		-												
		-												
		-	_											
	1565.51	t	7											
		Ļ												
1		-												
5/11/C		-												
DT	1564.51	t	8											
OT.G		F												
		╞												
1 L HE		╞												
15D.G	1563.51	t	9											
07901		Ľ												
DT 0(F												
JV_D(+												
Z				_	1		1	1	1	1	1			

					_		3/	28/00			EXPL	ORATIO	N LOG			
					ST	ART DATE	<u> </u>	20/00								SHEET 1 OF 1
					EN	ND DATE		20/00	Eroowov E	vtonoic	n Droio	~ +		STATION	79+66 "P1	
					JC	B DESCRI	PTION			xtensic	in Floje	JL		OFFSET	24.76 RT	
	- mark				LC	CATION			Jounty, Ne	/ada				ENGINEER	 	
	2Mm	2			BC	ORING		9+51	_	[]		 Tim	
	The second se				E./	A. #		79-01-	, ,							
	2e	/			GF	ROUND EL	EV15	o/2.53 (m)		3/28/00	NE		METHOD	Irackhoe	
					HA	MMER DR	OP SYS		IA	[BACKFILLED	_YesD	ATE 3/28/2000
	ELEV.	DEPT	гн	SAN	/IPLE	BLOW CO	OUNT	Percent		USCS		ΜΔΤΙ				REMARKS
	(m)	(m)		NO.	TYPE	Increments	300 mm	Recov'd		Group		Soft to mo			to highly	
		-										weathered	d, olive brov	/n/grey,	to highly	
		-										Metasedir properties	mentary Be	drock with the s / Gravel with Sa	soil index	
										GC		approxima	ately 23% m	edium plastic fi	nes, 38%	
	1571.53	-1	.91	^						-		fine to coa	arse sand, 3	9% fine to coar	se gravel.	
		_ 1	.22	A	GRAB				MC, SA, PI	-						
		-									1.52					
		- 1	.83							GP		Soft to mo	oderately ha	rd, highly weath	nered,	
	1570 53	-2 0		в	GRAB				MC. SA. PI	GC		the soil in	dex propert	es of a Poorly (Graded	
	1010100	- 2	.13		_						2.13	Gravel wit	th Clay and astic fines.	Sand, with appi 19% fine to coa	roximately rse sand.	
		_										74% fine t	to coarse gr	avel with appro	ximately	
		-										15% smai	II CODDIES.]	
	1560 52	1														
	1509.55	3														
		-														
		-														
		-														
	1568.53	4														
		-														
		-														
		-														
	1567.53	-5														
		_														
		-														
	1566.53	-6														
		-														
		_														
	1565.53	-7														
		-														
		-														
1/01																
5/1,	1564.53	-8														
.GDT		-														
DOT		-														
N		F														
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015D.	1000.00	-														
)670C		\vdash														
OT (F														
NV_C		-														

				-		. 11	/4/98			EXPLORATION LOG		
				S		<u>''</u>	/4/98				00.07	SHEET 1 OF 1
				E	ND DATE		1-580	Freeway F	vtoncia	n Project	STATION 82+67	"Р1" эт
				JC	DB DESCRI	PTION					OFFSET 41.311	
	- Sm			LC	DCATION		20150	Journy, Nev	aua		ENGINEER Acker	
	N.			B	ORING	0	2+50	_			OPERATOR Peterso	on
	4			E.	A. #		079-01-	、 、		DATE DEPTH m ELEVEL	DRILLING	-
	te			G	ROUND EL	EV. 15	64.02 (m)	<u> </u>	11/4/98 NE	METHOD HQ CO	re
				H	AMMER DR	OP SYS	STEM _	cope - Cathe	ead		BACKFILLED Yes	_ DATE11/4/1998
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION	REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group	Slightly hard to mode	rately hard highly	
		- 0.00								weathered, fractured	Volcaniclastic Mudflows	
		-								Thin soft zones along	fractures.	
		- 0.01	А					w, PI, Sv				
	1563.02	-1	В					Sh, P	_			
		-										
		- 1.52										
		-										
	1562 02	_ 2										
		-	~									
		-	C					W, PI, SV				
		-										
	1561.00	2 3 05										
	1561.02									Soft and weathered fi	rom 3-4 meters.	Lost circulation.
		-										
		- 3.66	E					w, PI, Sv,	_			
		-	D					w, PI, Sv				
	1560.02	<u></u> 4								Hard clay lense 0.3 m	neters thick.	
		_										
		4.57							-			
		-										
	1559.02	-5	F							Clay lense 6 cm. thick	К.	
		_ 5.64										
		-								Soft and degraded to	Clavey Gravelly Sand wit	th
	1558.02	-6								20-30% low to mediu	m plastic fines from	
		-	G							5.8-7.6 meters.		
		6.83							-			
	1557.02	704	Н						-			
		7.38	Ι									
1/01		_	J									
T 5/1	1556.02	+8 017										
T.GD		0.17	-						-			
DO		-	к									
Ň		- 0.00								o o Clav lense.		
O.GP,	1555.02	-9	-							0.30		—
3 015[-										
3200		-										
DOT		Ĺ										
N		[

						. 11	/4/98			EXPLORATION LOG			
				S	IART DATE		/5/02					04.00 """	SHEET 1 OF 2
				El	ND DATE		10190		vtenci	n Project	STATION	84+20 "P"	
				JC	DB DESCRI	PTION			xtensi		OFFSET	<u>6.48 K I</u>	
	200			LC	OCATION			Jounty, Ne	aua		ENGINEER		
	2MM	6		B	ORING	30	4+00				EQUIPMENT	Peterson	
	4			E.	A. #	00	79-01-	5		GROUNDWATER LEVEL		100000	
	ž.			G	ROUND EL	EV15	67.80 (m)		11/5/98 NF	METHOD	HQ Core	
			1	H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead		BACKFILLED	_Yes DA	TE <u>11/5/1998</u>
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT	Percent		USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group	Sandy Clay surface s	oil with hard vo	Icanic	I LEMANICO
		- 0.00	Δ					W DI SV	CL	boulders to 1.2 meter	S.		
			A					W, PI, 3V		Hard, slightly weather	red, fractured, d	lark grey	
		0.76							-	to grey Andesite Bed	rock.		
	1566.80 -	-1											
		-											
		- 1.52	в					w. Pl. Sv	4				
		-	Ĉ					,,.					
	1565.80 -	_2								Clay seam 15 cm. thi	ck.		
		- 2.29											
		_							1				
		-											
		-											
	1564.80 -	3	D							Highly fractured with	thick clay fractu	re infilling.	
		_									·	-	
		_											
		3.81							-				
	1563.80 -	-4											
		-								Thin shattered zone v	with clay infilling		
		_	Е								with city infining	•	
		_											
	1562.80 -	-5											
		- 5.33											
		-]				
	1561 80 -	-6											
	1001100	-	F							Moderately fractured	with little to no	clay	
		-								infilling.			
		-											
	4500.00	- 6.86							-				
	1560.80 -	[
		-	G										
+		_ 7.62	н					w, PI, Sv	-				
/11/0		7.92											
JT 5,	1559.80	-8]	Shattered with high p	lastic clay infillir	ng from	
T.GL		F								7.9-9.1 meters.			
/_DC		8.53	J					w, PI, Sv	-				
N N		- 8.87											
D.GP	1558.80 -	-9							1				
9015		-											
007		-	ĸ										
DOT		-	r.										
NN													

						11	/4/08			EXPLO	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	/4/90								SHEET 2 OF 2
				E١	ND DATE		/5/98	 					STATION	84+20 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E		n Projec	t.		OFFSET	6.48 R I	
	.sm	x		LC	OCATION		ashoe (Jounty, Nev	ada				ENGINEER	Ackor	
	2 Mm			BC	ORING	-08	4+00		r				EQUIPMENT	Peterson	
	Ä			E.	A. #	00	79-01-5)		GROU					
	n n			GI	ROUND EL	EV. 15	67.80 (m)	ł	11/5/98	NE	ELEV. M	METHOD	HQ Core	
		<u>))</u>		HA	AMMER DR	OP SYS	STEM R	tope - Cathe	ead				BACKFILLED	_YesDA	TE <u>11/5/1998</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT	Percent		USCS		ΜΔΤΙ				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group						NEMARINO -
		_ 10.24							-						
		_													
		_													
	1556.80 -	-11	L												
		-													
		11.58							_						
		_													
	1555.80 -	-12									Shattered	zones with	n clay infilling.		
		-	М												
		_													
		12.05													
	1554.80 -	-13							-						
		-													
		_	Ν								Shattered	zones with	n clay infilling.		
		_													
	1553.80 -	-14													
		-							-						
		-	0												
	1552.80 -	- 15													
		- 15.30							-						
		_									Highly fra	ctured with	minor clay infillir	na	
		_	Р								inginy na			.9.	
	1551.80 -	- 16													
		16.37							-						
		_									Clay sean	n.			
		-	Q								Shattered	with minor	clay infilling.		
	1550.80 -	- 17													
		- 17.28							-						
5		-	R												
5/11/C		- 17.89							-						
DT (1549.80 -	18	S							18 20					
DT.G		- 10.29								10.29					
N		-													
ΓďΒ	1 - 10	-													
115D.(1548.80 -	19													
06700		-													
) T (-													
		-													

SHET 102 SHET 10F 6 END DATE 1022998 Job DESCRIPTION I-580 Freeway Extension Project STATION 5811 RT JOCATON Washed County, Nevada Ecourteria Ball RT JOCATON Washed County, Nevada Ecourteria Ball RT JOCATON Washed County, Nevada Ecourteria Ball RT JOCATON ELA: GOTGATO Ball RT JOCATON ELA: GOTGATO Ball RT JOCATON ELA: GOTGATO Ball RT JOCATON ELA: DEFIN BELLING MATERIAL DESCRIPTION Heid Jonation JOCATON ELA: DEFIN MELLING MATERIAL DESCRIPTION Heid Jonation JOCATON La TOT Vision MATERIAL DESCRIPTION Material Control Control JB0003 -1 JOCATON La TOT Vision JOCATON Plandation JOCATON Plandation JOCATON JOCATON JOCATON JOCATON JOCATON JOCATON JOCATON JOCATON JOCATON JOCA							10	/24/08			EXPLORATION LOG			
END DATE 1/2000 STATION 8/33 P ² JOB DESCRIPTION 1/200 Fidewary Extension Project OF 321 P ² END NE STATION 8/31 P ² LOC TON Washoe County, Nevada Environ 1/200 Fidewary Extension Project OF 321 P ² Environ 1/200 P ² Environ 1/200 P ² Environ 1/200 P ² Participan					ST	ART DATE	10	/24/30						SHEET 1 OF 6
Lick and DESCRIPTION L-900 Treating Zurity, Nevada OFFSET B RL Lick and DESCRIPTION Washed County, Nevada Environment Participation Partingetinget and participation Participatio					E١	ND DATE		1 500		vtonst	n Drojaat	STATION	85+53 "P"	
EXAMPLE DOCATION Washing County, New 2002 SORNING 0054-05 County, New 2002 Encomposition Encomposition Peterson SORNING Case of 0075-01-5 County, New 2002 Encomposition Peterson Peterson Peterson NAME BOOK COUNT Lan rests BSCS MATERIAL DESCRIPTION Resterson 100203 No No Lan rests BSCS MATERIAL DESCRIPTION Resterson 100204 No No No Peterson Peterson Peterson 100204 No No No Peterson Peterson Peterson Peterson Peterson 100204 No No No Peterson					JC	B DESCRI	PTION	1-580		xtensio	on Project	OFFSET	8.91 RT	
DORING UBSH30 EA. # DOTO PLIST EA. # DOTO PLIST Petrason ANALL COUNDUATER LEV. 1568.03 (m) DTE DEPTINT ELEV. DEPTINT Petrason HQ Core MAMER DROP SYSTEL RODO Cathod VIS DATE DEPTINT ELEV. DEPTINT					LC	OCATION		ashoe (Jounty, Nev	ada		ENGINEER	Ackor	
E.A.* U/9/9/1-5 (RCUND FLEW, 1568.03 (m)) Date per Lew (D2208 / m) Description (D2208 / m) Description (D2208		1 May			BC	ORING	30	5+50				EQUIPMENT	Peterson	
BROUND ELEY. 1988.03 (m) Image: First of the second secon		Z.			E./	A. #	00	079-01-5)		GROUNDWATER LEVEL	DRILLING		
HAMMER DROP SYSTEM Rope - Cathead BACKFILLE Ves DATE 10/29/1998 BLEW DEPTH No. 1996 10/29/1998 MATERIAL DESCRIPTION Reacks Image: Status of the st		Ľ	1		GF	ROUND EL	EV15	68.03 (m)		10/29/98 NE	METHOD	HQ Core	
EE/v DEF/H SAMPLE EX/V/CME Def V/FE Fraction Remarks 100 100 NO. 17/FE isome Lass biological Marce State Hard, slightly to moderately weathered, fractured to hight fractured hight fractured hight fractured to hight fracture					HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	Yes D	ATE <u>10/29/1998</u>
1667.03 1 Fractured to high fractured. dark grey Andeske Bedrock. Fractures occur on 0.15 to 3 meter intervals. Pieced casing to 1.1 meters - no sample. 1667.03 1 1667.03 1 1667.03 2 1667.03 1 1667.03 1 1667.03 1 1667.03 2 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1667.03 1 1677.04 1 1687.		ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
1967.03 -1 0.3 meter intervals. 0.3 meter intervals. 1960.03 -2 -2 -2 1960.03 -2 -2 -2 1960.03 -4 -4 -4 1960.03 -4 -4 -4 1960.03 -5 -6 Clay seam. 1960.03 -6 Clay seam. 1960.03 -7 -4 1960.03 -7 -6 1960.03 -7 -6 1960.03 -7 -6 1960.03 -7 -6 1960.03 -7 -6 1960.03 -7 -6 1960.03 -7 -7 1960.03 -7 -6 1960.03 -6 -7 1960.03 -6 -7 1960.03 -7 -7 1960.03 -6 -7 1960.03 -6 -7 1960.03 -6 -7 1960.03 -6 -7 1960.03 -6 -7			-								Hard, slightly to mode fractured to highly fra Andesite Bedrock	erately weathere ctured, dark gre	ed, y n 0.15 to	Placed casing to 1.1 meters - no sample
1967.03 -1 1967.03 -2 1968.03 -2 1968.03 -3 1968.03 -3 1968.03 -4 1968.03 -4 1968.03 -5 1968.03 -5 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -5 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -6 1968.03 -7 1968.03 -8 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.03 -9 1969.04 -1			_								0.3 meter intervals.			Sumple.
1867.03 -1 1866.03 -2 1866.03 -2 1865.03 -3 -3			-											
1966.03 -2 1966.03 -3 1965.03 -3 1966.03 -4 1966.03 -4 1964.03 -4 1964.03 -5 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -6 1962.03 -7 1962.03 -6 1962.03 -6 1962.03 -7 1962.03 -6 1962.03 -7 1962.03 -8 1962.03 -8 1962.03 -9 1962.03 -8 1962.03 -9 1962.03 -8 1962.03 -9 1962.03 -8 1962.03 -9		1567.03	+1											
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1960.03 -2 1960.03 -3 1960.03 -3 1960.03 -4 1960.03 -5 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1960.03 -6 1990.01 -7 1990.01 -9 1990.02 -9 1990.03 -9 1990.04 -9 1900.05 -9 1900.06 -1 1900.07 -9 1900.07 -9 1900.07 -9			-											
1565.03 -3 1564.03 -4 1564.03 -4 1564.03 -4 1564.03 -6 1564.03 -6 1564.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1562.03 -6 1561.03 -7 1560.03 -8 1560.03 -8 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -8 1560.03 -8 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -0 1560.03 -0 1560.03 -0 1560.03 -0		1566.03	-2											
1965.03 -3 -3 Thin clay seam. Fractures occur at 15-30 degrees. 1964.03 -4 -4 -4 1963.03 -5 -5 1963.03 -6 Clay seam. 1969.03 -6 Clay seam. 1969.03 -7 -4 1969.03 -7 -4 1969.03 -8 -4 1969.03 -9 Highly fractured with thin clay infilling and zones of intense weathering. 2000 -7 -4 1969.03 -9 Zones of shattered bedrock.														
1566.03 -3 1566.03 -4 1564.03 -4 1563.03 -5 1563.03 -5 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -7 1560.03 -9 1560.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -9 1550.03 -0 1550.03 -0 1550.03 -0 1550.03 -0 1550.03 -0 1550.03 -0			_											
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1564.03 -4 1564.03 -4 1563.03 -5 1563.03 -5 1563.03 -6 1563.03 -6 1563.03 -6 1563.03 -6 1563.03 -6 1563.03 -6 1563.03 -6 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -7 1563.03 -8 1563.03 -7 1563.03 -7 1563.03 -8 1559.03 -9 1560.03 -8 1560.03 -8 1560.03 -8 1560.03 -8		1565.03	-3								Thin clay seam. Frac	ures occur at 1	5-30	
1564.03 -4 1563.03 -5 1562.03 -6 1561.03 -7 1561.03 -7 1560.03 -8 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9 1560.03 -9											degrees.		5.50	
1564.03 -4 1563.03 -5 1562.03 -6 1561.03 -7 1561.03 -7 1560.03 -8 1560.03 -9 1560.03 -9 1559.03 -9 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -6 1560.03 -7 1560.03 -6 1560.03 -6 1560.03 -7 1560.03 -6 1550.03 -7 1550.03 -8 1550.03 -9 1550.03 -9 1550.03 -1 1550.03 -1 1550.03 -1 1550.03 -1 1550.03 -1 1550.03 -1			_											
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1551.03 -17 16.76 1551.03 -17 Very soft to soft, extremely weathered and altered, grey to brick red Andesite bedrock. Altered to Sandy Clay. 1550.03 -18 -17.83 1550.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -17.83 1150.03 -18 -18.29 Very soft, highly to completely weathered, red Andesite Bedrock. Degraded to Silty and Clayey Sand. 11549.03 -19 11549.03 -19 11549.03 -19 11549.03 -19 11549.03 -19 11549.03 -19 11549.03 -19 11549.03			-													
1551.03 -17 16.76 1551.03 -17 Very soft to soft, extremely weathered and altered, grey to brick red Andesite bedrock. Altered to Sandy Clay. 1550.03 -18 17.83 1550.03 -18 Hard, weathered, fractured, grey to dark grey Andesite Bedrock. 18.29 Very soft, highly to completely weathered, red Andesite Bedrock. Degraded to Silty and Clayey Sand.			-			ĺ										
1551.03 -17 1551.03 -17 1551.03 -17 1550.03 -18 1550.03 -18 1540.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 15			-								16.76					
Instruction Image: Construction Image: Construction Image: Construction 100100 - - - 1550.03 - 18 - 1550.03 - 18 - 1550.03 - - - 1540.03 - - - 1549.03 - - - 1549.03 - - - 1549.03 - - - 1549.03 - - - 1549.03 - - - 1549.03 - - -		1551 02	L_17									Very soft	to soft, extr	emely weather	ed and	
1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -18 1550.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19 1549.03 -19		1551.03										Altered to	o Sandy Cla	ieu Anuesite D y.	eurock.	
1550.03 - - - Hard, weathered, fractured, grey to dark grey Andesite Bedrock. 18.29 - - 1549.03 - - 1549.03 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td></td> <td></td> <td>L</td> <td></td> <td>-</td> <td></td> <td></td>			L											-		
1550.03 -18 1550.03 -18 - - - - - - - - 1549.03 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>÷</td> <td></td> <td>F</td> <td></td>	÷		F													
1550.03 18 1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <	/11/0		-								17.83	Hard we	athorad fra	oturod aroute	hark grou	
1549.03 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>JT 5,</td> <td>1550.03</td> <td>- 18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Andesite</td> <td>amered, fra Bedrock.</td> <td>ciarea, grey to (</td> <td>aik giey</td> <td></td>	JT 5,	1550.03	- 18									Andesite	amered, fra Bedrock.	ciarea, grey to (aik giey	
Andesite Bedrock. Degraded to Silty and Clayey Sand. 1549.03 - 19 	T.GL		F								18.29	Vonucoff	highly to a	moletalywaath	pered rod	
1549.03 -19 1549.03 -19 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>00</td> <td></td> <td>Andesite</td> <td>Bedrock. [</td> <td>Degraded to Silt</td> <td>y and</td> <td></td>	00											Andesite	Bedrock. [Degraded to Silt	y and	
1549.03 -19 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	NV N		Ľ									Clayey S	and.			
	C.GP,	1549.03	-19													
	015		-													
	0079		F													
	Ď		-													
	1		-													

						10	1/2//08			EXPLORATION LOG			
				ST	FART DATE		/24/90						SHEET 3 OF 6
				E١	ND DATE		1/29/96	 		s Drainat	STATION .	85+53 "P"	
				JC	DB DESCR		1-580		xtensic	n Project C	OFFSET	8.91 RT	
	34	~		LC	OCATION		asnoe (Jounty, Nev	ada	E	ENGINEER	Ackor	
	2MM	6		BC	DRING	30	5+50		[E	EQUIPMENT	Peterson	
	Ę			Ε.	A. #	00	079-01-5)		GROUNDWATER LEVEL			
	Ľ			GI	ROUND EL	.EV15	68.03 (m)		10/29/98 NE	METHOD	HQ Core	
				HA	AMMER DF	ROP SYS	STEMR	lope - Cathe	ead	В	BACKFILLED	Yes DA	TE 10/29/1998
	ELEV.	DEPTH	SAI	MPLE	BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DES	CRIPTION		REMARKS
	(m)	(m)	NO.	TTPE	Increments	300 mm	Recov'd		Group				
		-											
		_											
	1547.03 -	-21											
		-											
	1546.03 -	-22											
		-								More competent rock (c	lightly hard) ir	largo	
		-								zones.	signuy naru) ii	riarye	
	1545.03 -	-23											
		-											
		-											
		_											
	1544.03 -	24								24.08			
		-								Moderately hard to hard weathered highly fractu	d, weathered to	o highly	
		L								Andesite Bedrock.		,,	
		_											
	1543.03 -												
		-											
		_											
	1542.03 -	-26											
		-											
		Ē								Completely weathered a	and shattered	in zones	
		-										20103.	
	1541.03 -	-27											
		+											
		_											
11/01		-											
JT 5/	1540.03 -	-28											
DT.GL		Ľ											
V_DC		Ĺ											
N Cc		-											
5D.GF	1539.03 -	- 29											
7901		F											
T 00		F											
/_DO		-								29.87			
ź													

						. 10)/24/98			EXPL	ORATIO	N LOG			
				S		10)/29/98								SHEET 4 OF 6
				El	ND DATE		1_FQU		vtencia	n Proio	~ t		STATION	85+53 "P"	
				JC	DB DESCRI	PTION	1-500			лггоје	<i>.</i>		OFFSET		
	- Am			LC	DCATION		25,50	Journy, Nel	aud				ENGINEER	Acker	
	2 Mar			BC	ORING	0		_		0001				Peterson	
	1 m			E.	A. #		079-01-0)				ELEVEL	DRILLING		
	le			GI	ROUND EL	EV15	568.03 (m)		10/29/98	NE		METHOD	HQ Core	
			N	HA	AMMER DR	OP SYS	STEM	cope - Cath	ead				BACKFILLED	Yes DA	TE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		-									Soft to slig	ghtly hard, \ anic Mudflo	weathered, fract	tured,	
		-									5 - 5				
		_													
	1537.03 ·	-31													
		-								31.24					
		-									red Rhyol	ly hard, wea lite Bedrocl	athered, fracture (.	ed, grayish	
											-				
	1536.03 ·	-32													
		-								22.40					
		-								32.40	Soft to slig	ghtly hard, v	whitish green to	pink and	
											grey, wea	thered, alte	red Volcanic M	udflows.	
	1535.03	-33													
		-													
		-													
	1534.03	34													
		-													
		-													
	1533.03														
		-													
		-													
	1532.03 -	-36													
		F													
		-													
	1531.03	-37													
		-													
		-													
1/01		Ĺ									Hard Rhy	olite Flow.			
r 5/1	1530.03	-38								37.95					
-GDT		-													
DOT		-													
NV I		Ľ													
J.GP.	1529.03 ·	-39													
3015L		F													
3200		-													
DOT		Ľ													
N															

						10	1/24/08			EXPL	ORATIC	ON LOG			
				S	FART DATE	10	1/20/00								SHEET 5 OF 6
				El	ND DATE		1/29/90	 			-4		STATION	85+53 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Projec	21		OFFSET	8.91 RT	
	34			LC	OCATION		asnoe	County, Nev	ada				ENGINEER	Ackor	
	1 Mart			B	ORING	-08	35+50		r				EQUIPMENT	Peterson	
	I.			E.	A. #	0	079-01-8)		GROU					
	He .	1		G	ROUND EL	EV15	568.03 (m)		10/29/98	NE	n ELEV. m	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesDA	TE
	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		ΜΔ٦		SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group						
		-													
		-													
	1527.03	-41													
		-													
		-													
		-													
	1526.03	42													
		_													
		-													
		-													
	1525.02	- 12													
	1525.05														
		-													
		-													
	4504.00	-													
	1524.03	44													
		-													
		-													
		-													
	1523.03	- 45													
		-													
		-													
		-													
	1522.03									46.18					
		Ĺ									Slightly h	nard, fracture	d, brown Clays	tone.	
		F								46.63	0 - 11 - 1	Parkat 1 1 1			
		-									Soft to s	iightiy hard, f	ractured, grey stone. Unlithifie	d in zones.	
	1521.03	-47											-		
		Ľ													
-		L													
/11/0		-													
JT 5/	1520.03	-48													
DT.GL		t													
V_DC		Ĺ													
N N		F													
D.GF	1519.03	-49													
79015		F								49.38					
r 007		Ĺ									Slightly h	hard, fracture	d, slightly weat	hered,	
		Ļ									grey to ta	an voicanic	viuatiows.		
Ž															

						4.0	121/00			EXPLO	ORATIO	N LOG			
				SI	ART DATE	10	1/24/98								SHEET 6 OF 6
				E١	ND DATE	_10	1 500		· · · · · · · · · · · · · · · · · · ·	n Droit			STATION	85+53 "P"	
				JC	B DESCRI	PTION	1-580	Freeway E	xtensic	n Projec	ct		OFFSET	<u>8.91 RT</u>	
		x		LC	OCATION	W	ashoe (County, Ne	/ada				ENGINEER	MG	
	W	C A		BC	ORING	-08	5+50		ſ				EQUIPMENT	ACKEr Deterson	
	Ä			Ε.	A. #	00	79-01-5	5		GROU	NDWATER		OPERATOR	Feleison	
	ž.			GI	ROUND EL	EV15	68.03 (m)		DATE 10/29/98	DEPTH m	ELEV. m	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEMR	Rope - Cath	ead	10/20/00			BACKFILLED	_Yes DA	TE10/29/1998
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		-													
		-													
		-													
	1517.03 -	- 51													
	1317.03														
		_													
		-													
		-													
	1516.03 -	-52													
		-													
		_													
	1515.03 -	-53									Small bar	d cobbloc		motrix	
		-									Smailmai		no recovery on	maunx.	
		[
	1514.03 -														
		-													
		-													
		-													
	1513.03 -	-55													
		-									Few cobb	les in flows			
		-											•		
		-													
	4540.00														
	1512.03 -	- 56													
		L													
		-													
		-													
	1511.03 -	-57													
_		L													
11/01		-									Large cob	obles and sr	nall boulders in	mud flows.	
T 5/	1510.03 -	-58													
T.GD		-													
DO															
NN L		Ľ								58.83					
D.GP,	1509.03 -	- 59								58.98	Clay sear	n.			
<u>}015</u>		-													
0075		-													
DOT		F													
NV_I		_													

							. 11	/6/98			EXPL	ORATIO	N LOG			
					S		: 11	/7/98								SHEET 1 OF 2
)		El			1-580	Freeway F	xtensi	on Proie	ct		STATION	0/+03 "P"	
					JC	DE DESCRI	VTION	ashoe (/ada				OFFSET	MG	
	22	à			LC -		<u>۰۰</u> ۵۲	37+00							Acker	
	M.M.M.	i M	9		BO		0)79_01_ <i>i</i>	5		GROU			OPERATOR	Peterson	
	1				E.	A. #	16	66 76 (m)		DATE	DEPTH m	ELEV. m	DRILLING		
					G	ROUND EL	EV	500.70 (Pope - Cath		11/7/98	NE		METHOD		11/7/1008
					H	AMMER DR	OP SYS	STEM		eau_	L			BACKFILLED	DA	TE
	ELEV. (m)	DE (I	PTH m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DE	SCRIPTION		REMARKS
		-	0.00							0		Moist, har aravel and	d, reddish b d cobbles. L	prown Sandy Cl arge surface bo	ay with oulders	
		-								CL	0.61	common.				
		F		Δ					W PL SV		0.61	Moist, der	nse to very	dense, reddish	brown	
	1565 76 -			~					w, i i, ov			Clayey Sa	and with abo	undant hard vol	canic	
	1000.10	ŀ.										0000103.				
		F	1.52													
		-]						
	1564 76	Ĺ,														
	1504.70 -	–		в					w. Pl. Sv							
		-		-												
		+														
		-	2.90							SC						
	1563.76 -	-3														
		-														
		-		с					w. Pl. Sv			Abundant	cobbles an	d boulders to 0	.6 meters.	
		-		-												
	1562.76 -	-4														
		[4.42													
		F														
		F									5.02					
	1561.76 -	-5		D					w, PI, Sv		5.03	Hard, high	nly fractured	d, slightly weath	ered, grey	
		F										Andesite fractures	Bedrock. H	leavier weatheri	ng in	
			5.64							4		nactures.				
		F														
	1560.76 -	6		F					w, PI, Sv,							
		F		L					Sh							
		F	6.71													
		-								1		Zone of sl	hattered roo	ck 0.3 meters th	ick.	
	1559.76 -	-7														
		E		_												
F		F		F												
11/0		F														
JT 5/	1558.76 -	-8	8 22													
DT.GL		E	o.23							1						
V_DC		E		G												
NN Le		F		0												
D.GF	1557.76 -	-9	8.99							-		Zone of st	hattered roo	ck 0.3 meters th	ick.	
79015		F		ы												
L 007		Ľ		п												
			9.75							-		Shottorod	from 0 7 4	3.4 motors		
N												Snattered	1011 9.7-1	5.4 meters.		

				-		. 11	1/6/98			EXPL	ORATIO	N LOG			
				S		· _ · ·	/7/02							07 00 "5"	SHEET 2 OF 2
				El	ND DATE		1_500		vtoncio	n Droio	∼t		STATION	87+03 "P"	
				JC	DB DESCRI	PTION	1-500		xiensiu vodo	irroje	JL		OFFSET		
	- Am			LC	OCATION		asilue (Journy, Nev	aud				ENGINEER	Acker	
	S.W.M			B	ORING	0	07+00	_	[0000				Peterson	
	4 m			E.	A. #		079-01-0) 					DRILLING	110.0	
	2e			G	ROUND EL	EV15	566.76 (m)	[11/7/98	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM _	cope - Cathe	ead				BACKFILLED	Yes DA	TE 11/7/1998
	ELEV.	DEPTH	SA		BLOW CO 150 mm	DUNT Last	Percent	LAB TESTS	USCS		MAT		ESCRIPTION		REMARKS
	(m)	(m)	II.		Increments	<u>300 mm</u>	Recov'd		Gioup						
		10.36													
		-	J					w, PI, Sv			Clayey G	ravel seam.			
	1555.76	¹¹ 11.13													
		-													
			к												
		- 11.89													
	1554.76	-12													
		-									Clay sear	m.			
			L												
		12.05													
	1553.76	12.95							-						
		-													
			М												
		12.00													
	1552.76	-14							_		Highly sh	attored with	clay infilling fro	m	
		-	N								13.4-16.8	8 meters.	ciay mining noi		
		14.63													
		_													
	1551.76	- 15	0												
		15.39													
		_													
		_													
	1550.76	-16													
		-	Р					w, PI, Sv							
		16.92									Moderate	ly fractured	- highly weather	red and	
	1549.76	-17	1						1		softer.		mgmy weather		
		F													
		Ľ													
11/01		-	Q												
T 5/1	1548.76	-18													
T.GD		19.44								19.11					
DO		_ 10.44								10.44					
NN ارد		-													
D.GP	1547.76	-19													
79015		-													
T 007		Ĺ													
DO		Ļ													
N							1								

						11	/8/08			EXPLORATION LOG			
				S	FART DATE	11	/0/90						SHEET 1 OF 1
				El	ND DATE		1 500	Eroowov E	vtonoic	n Drojaat	STATION	<u>88+49 "P"</u>	
				JC	DB DESCRI	PTION	1-580		xtensic	on Project	OFFSET	0.42 RT	
	34			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
	2WM	6		B	ORING	30	88+50		(EQUIPMENT	Peterson	
	Ä			E.	A. #	00	079-01-5	5		GROUNDWATER LEVEL			
	Ľ			G	ROUND EL	EV15	541.58 (m)		11/8/98 NE	METHOD	HQ Core	
			N	H	AMMER DR	OP SYS	STEMR	Rope - Cathe	ead		BACKFILLED	_YesDA	TE <u>11/8/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.0	0							Moist, very stiff to har	d, red brown Sa	andy	
		_							CL	plastic fines, 40% ver	y fine to coarse	sand, 10%	
		-								0.61 gravel. Large surface	boulders prese	nt.	
		-	A					w, PI, Sv		weathered and degra	ded, reddish gr	ey	
	1540.58	<u>+</u> 1								Andesite Bedrock. R fractures.	ed clay infilling	in	
		- 15											
		-	2 R						-				
		_ 1.8	3					w, F1, 3V	-	Harder with less clay	infilling		
	1539.58	-2	с								mining.		
		2.4	4										
		_							-				
		-	D										
	1538.58	-3 3.0	5 E					w, PI, Sv		3.05			
		-											
	1537.58	-4											
		-											
		-											
	1536.58	-5											
		-											
		Ľ											
	1535.58	-6											
		-											
		-											
	1534.58	-7											
		-											
		-											
/01		-											
5/11	1533 58	-8											
GDT	1000.00												
DOT.		-											
N		-											
GPJ	1522 50	Ĺ.											
015D.	1002.00	9											
)079(F											
OT (-											
		-											

						1/-	13/00			EXPLORATION LOG	
				ST	FART DATE	<u> </u>	10/00				SHEET 1 OF 7
				E	ND DATE	1/*	19/99	Eroowey F	vtona	STATION	"P"
				JC	DB DESCRI	PTION	00C-I			OFFSET 0.47 L	<u> </u>
	- Sam			LC	OCATION		asi i Ue (Journy, Nel	aud		
	No. of the second secon			BC	ORING	0	70 01 4				on
	4			E.	A. #	15	19-01-0	m)		DATE DEPTH m ELEV. m DRILLING	
				GI	ROUND EL	EV13	F 1.00 (nn) 2009 - Cath		1/19/99 NE METHOD Yes	
				HA	AMMER DR	OP SYS			eau	BACKFILLED Tes	_ DATE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		0.00 	A							Moist, dense to very dense, dark brown Clayey Gravelly Sand with variable 20-30% medium plastic fines, 60-70% fine to coarse sand, 10% fine to coarse gravel. Cobbles comprise less than 5% of soil mass. Zones of low plastic fines.	Placed casing to 12.8 meters after coring to 11.6 meters.
	1540.66 -										
		- 1.68	в					w, PI, Sv	-		
	1539.66 -	-2									
		-							SC		
		-									
		-									
	1538.66 -	-3									
		_									
		-									
	4507.00	-									
	1537.00	-4								4.27	
		-								Moist, very dense, slightly cemented, brown	
		-								slightly plastic fines, 70% fine to coarse sand,	
	1536.66 -	-5								10% gravel. Few hard cobbles.	
	1000100	-									
		-							CM		
		_							SIVI		
	1535.66 -	-6									
		+									
		Ľ									
		Ļ								6.86	
	1534.66 -	-7								Hard, slightly weathered, fractured, grey to dark grey Volcanic Bedrock	
		F								Carrier groy Volcanio Bourook.	
		_									
11/01		-									
JT 5/	1533.66 -	-8									
DT.GL		_									
N_DC		-									
N L d		-								Highly fractured with increased weathering in	
15D.G	1532.66	-9								fractures and zones of clayey gravelly sand	
0620		Ļ								infilling.	
0T 0		-									
		-									

						1/	12/00			EXPLORATION LOG		
				ST	ART DATE		13/99					SHEET 2 OF 7
				EN	ID DATE	1/	19/99				STATION89+13 "F)"
				JC	B DESCR	PTION	1-580	Freeway E	xtensio	n Project	OFFSET 0.47 LT	
				LC	CATION	W	ashoe (County, Nev	vada		ENGINEER MG	
	MA			BC	RING	08	9+20		r		EQUIPMENT Acker	
	1 A			Е./	A. #	_ 00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR Peterson	
	in the			GF	ROUND EL	EV. 15	41.66 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD HQ Core	
				HA		OP SYS	R	ope - Cathe	ead	1/19/99 NE	BACKFILLED Yes	DATE 1/19/1999
			SAN		BLOWC					1		
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm	Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DI	ESCRIPTION	REMARKS
	1530.66	- - - - - - - - - - - - - - - - - - -								Highly fractured to sl infilling. Highly fractured with	nattered with minor clay thin clay infilling.	Lost sample from 11.6-12.8 meters due to casing over drill.
	1528.66	- - - - - - - - - - - - - - - - - - -								Soft, grey Sandy Cla	y seam 0.25 meters thick.	
	1526.66	- - - - - - -								Highly fractured with	little or no clay infilling.	
	1525.66	- - - -								Thin clay seam.		
11/01	1524.66									17.53 Soft, completely wea tan Volcanic Bedroc	thered, altered, orange k. Bedrock is altered to	_
I NV_DOT.GDT 5/	1523.66	- - -								medium to high plast unit is well defined at 18.44 Hard, slightly weathe Volcanic Bedrock.	tic clay. Contact at top of t 50 degrees. ered, highly fractured, grey	_
IV_DOT 0079015D.GP.	1522.66	- - - -								Fractures at 50 degre	ees. with thin clay infilling.	

						1/	13/00			EXPL	ORATION	N LOG			
				S	TART DATE	1/ 1/	10/00								SHEET 3 OF 7
				EI	ND DATE	1/	19/99	 Eroower 5	vton-:-	n Drois	. +		STATION	89+13 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Projec	21		OFFSET	0.47 L1	
	34			LC	OCATION		asnoe (Sounty, Ne	/ada				ENGINEER	Ackor	
	2MM	6		B	ORING	-08	39+20		ſ]	EQUIPMENT	Peterson	
	Z.			E.	A. #	0	079-01-5)		GROU		LEVEL			
	Ž.			G	ROUND EL	EV15	541.66 (m)		1/19/99	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMR	lope - Cath	ead				BACKFILLED	_YesDA	TE <u>1/19/1999</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
					Increments	000 1111	T COOV G				Fracture a	t 70 degree	es. with 1.3 cm	clay	
		_									infilling.				
		-													
		-									Moderate	v froaturad	with minor alow	infilling	
	1520.66	-21									Thin shatt	ered zones	at 20.5 and 21	.2 meters.	
		_													
		_													
		-													
	1519.66	-22													
											Shattered	and highly	weathered 0.15	5 meters	
		-									thick. Clay seam	n 8 cm thick	ζ.		
		-									elaj ecal				
	1518.66	-23													
		_													
		-													
	1517.66	-24													
		_													
		-									Highly frac	ctured with	1 cm clay infillir	ng.	
	1516.66	- 25													
		_													
		_													
		-													
	1515.66	-26													
											Clay seam	n 0.15 mete	ers thick.		
		L													
		-													
	1514.66	-27								27.13					
		Ĺ									Moderatel Bedrock	y to highly f	fractured Volca	nic n centers	
											at 20-30 d	egrees s	ingle direction p	referred.	
11/01		-									Minor clay	infilling in t	few fractures.		
λT 5/	1513.66	-28													
T.GD		-													
/_DC		Ľ								28.65					
N Lc		-									Thin clay	seam.			
SD.GF	1512.66	-29									Clay seam	n 8 cm thicl	κ.		
9015		-									Moderatel	y fractured	at 35 degrees.	with single	
r 007		L									preferred	orientation.			
DOT		Ĺ													
N															

				-		. 1/-	13/90			EXPLORAT	ON LOG			0
				ST	ART DATE	<u> </u>	10/00							SHEET 4 OF 7
				EN	ND DATE		15/33	Eroowov E	vtoncio	n Project		STATION	<u>89+13 "P"</u>	
				JC	B DESCRI	PTION			vada	ITTOJECI		OFFSET	MG	
	- An			LC	OCATION		20120	Journey, Nev	aua			ENGINEER	Acker	
	×.			BC	ORING	0	70 01 6		[Peterson	
	1 m			E.	A. #		19-01-0) m)				DRILLING		
	h			GI	ROUND EL	EV13	941.00 (III)		1/19/99 NE		METHOD		4/40/4000
			N	HA	AMMER DR	OP SYS	STEM	tope - Cathe	ead			BACKFILLED	Yes DA	TE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MA	TERIAL DI	ESCRIPTION		REMARKS
		-								Clay se	eam 8 cm. thic	×k.		
	1510.66	31 								Clay se Highly meters	eam 10 cm thi fractured with thick.	ck. moderate weat	hering 0.3	
	1509.66													
		-								Clay se 32.77	eam 6 cm thic	k.		
	1508.66	- 33								Hard, V Volcan infilling	veathered, hig i c Bedrock wi	th thin clay fraction	shattered	
		-												
	1507.66	34												
		-												
	1506.66	35 												
		-								35.66				
	1505.66	- 36 -								Hard, s grey V 3-15 cr orienta	slightly weathe blcanic Bedro n at 35 degree tion. No clay in	red, highly fract ck . Fracture sp es. with single p nfilling.	tured, dark acing at oreferred	
	1504.66													
/01		_												
T.GDT 5/11	1503.66	- 38												
SPJ NV_DC		-								39.01				
OT 0079015D.C	1502.66									Hard, v Variab Zones	veathered, sha e fracture orie occur where c	attered Volcani Intations with classified of the second se	c bedrock . ay infilling.	
		-												

						1/	12/00			EXPLORATION LOG		
				ST	ART DATE	= <u> </u>	13/99					SHEET 5 OF 7
				EN	ID DATE	1/	19/99				STATION89+13 '	P"
				JC	B DESCRI	PTION	1-580	Freeway E	xtensic	n Project	OFFSET 0.47 LT	
	.tm			LC	CATION		ashoe (County, Nev	ada		ENGINEER MG	
	- Mar	6		BC	ORING	08	89+20		r		EQUIPMENT Acker	
	1 A	K 1		E./	A. #	00	079-01-5	5		GROUNDWATER LEVEL	OPERATOR	11
	and the			GF	ROUND EL	EV15	641.66 (m)		DATE DEPTH m ELEV. m	METHOD HQ Cor	е
			4	HA	AMMER DR	OP SYS	STEMR	Rope - Cathe	ead		BACKFILLED Yes	DATE 1/19/1999
		DEDTU	SAN	1PLE	BLOW C	JUNT	_		11000			
	elev. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION	REMARKS
		_										
		-										
		-										
		-										
	1500.66	-41										
		-										
		-								41.91		
	1499.66	-42								Hard, slightly weather	red, slightly to moderately	
		_										
		_										
		-										
	1498.66	-43										
		-										
		-										
	1497.66	-44										
		-								Clav fracture infilling	with intense weathering	
		-								around fracture.	j	
	1496.66	-45										
		-										
		-								45.57		
		-								Soft, highly weathered	d, hydrothermally altered,	
	1495.66	46								Volcanic Bedrock. Of	range clay fracture	
		-								infilling.		
		-										
		-										
	1404 66	47										
	1-0-1.00	- "										
		-										
01		-										
5/11/	1 400 00	-										
DT	1493.66	48										
OT.C		F										
		F										
I L H		F										
15D.C	1492.66	49										
,067C		Ĺ										
DT 0(F										
		-								Formation becomes s	lightly hard with very	
z		1				I	1	L	1	1		

						1/	13/00			EXPL	ORATION LOG			
				ST	FART DATE	1/	10/00							SHEET 6 OF 7
				E١	ND DATE	1/	19/99		vtonei	n Drain	at	STATION	89+13 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E		n Proje	<u>JI</u>	OFFSET	0.47 LT	
	. Days			LC	OCATION		asnoe (Jounty, Nev	ada			ENGINEER		
	2MM			BC	ORING	0	39+20					EQUIPMENT	Peterson	
	Ä			E.	A. #	00)79-01-5	5		GROU		OPERATOR	1 6(613011	
	n n n n n n n n n n n n n n n n n n n			GI	ROUND EL	EV15	541.66 (m)		DATE 1/19/99	NF	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM_F	Rope - Cathe	ead	1, 10,00		BACKFILLED	_YesDA	TE <u>1/19/1999</u>
	ELEV.	DEPTH	SAN	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	U SCS		MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group		minor fracturing to 52	.7 meters.		
		Ľ									-			
		_												
		-												
	1490.66 -	-51												
		-												
		Ľ												
		L												
	1489.66 -	-52												
		-												
		-												
										52.73	Soft highly weather	d elightly fractu	red	
	1488.66 -	-53									brownish red Volcanie	c Mudflow.		
		-												
		-												
		-												
	1487 66 -	-54								53.95	Llord alightly woath or	ad fracturad d	orle grove	
		-									Volcanic Bedrock.	ed, fractured, d	ark grey	
		-												
		-												
	1496.66	55												
	1400.00	- 55												
		-												
		-									Soft and highly weath	ered with reddis	sh brown	
		_									0001.			
	1485.66 -	-56								56.08	Soft, highly weathered	d. altered. fractu	ured.	
		-									variable colored Volca	anic Mudflows.		
		F												
		+												
	1484.66 -	-57												
		[
÷		F									Clickonsides of free t	mon deficite t		
/11/0		-									Slickensides on fractu	ires - aetinite st	iear zone.	
JT 5/	1483.66	-58												
DT.GL		Ĺ												
/_DC		Ľ												
NN L		-												
D.GP	1482.66	- 59												
9015		F												
002		F									Slightly fractured to be	ottom of hole.		
DOT		Ľ									<u> </u>			
N														

[1/	12/00			EXPLO	RATIO	N LOG			
				ST	ART DATE	1/	10/00								SHEET 7 OF 7
				E١	ND DATE	1/	19/99		vtonoio	n Droigot			STATION	89+13 "P"	
				JC	B DESCRI	PTION	00C-I		xtensio	n Projeci			OFFSET	0.47 L1	
	204	×.		LC	OCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			BC	ORING	<u>30</u>	9+20	-	[EQUIPMENT	Peterson	
	- A			Ε.	A. #		79-01-5	<u>,</u>					DRILLING		
	V			GI	ROUND EL	EV. 15	41.66 (m)	— t	1/19/99	NE		METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM _R	cope - Cathe	ead				BACKFILLED	Yes DA	TE 1/19/1999
Ī	ELEV.	DEPTH	SAI		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	ITE	Increments	300 mm	Recov'd		Gloup						
		-													
										60.66					
		-													
	1480.66 -	-61													
		_													
		-													
	1479.66 -	-62													
		-													
		-													
	1478.66 -	-63													
		-													
		-													
	1477.66 -	-64													
		Ę													
		-													
		-													
	1476.66 -	-65													
		-													
		-													
	4 475 00	-													
	1475.66 -	- 66													
		-													
		-													
	1474 66	67													
	1474.00 -	- 0/													
		-													
0		-													
5/11/	1472.66 -	- 69													
GDT	1413.00 -	- 00													
DOT.		-													
N		F													
GPJ.	1472 66 -	69													
015D.	1712.00	- 03													
0079		-													
Б		-													

							2/	28/00			EXPLORATION LOG			
					ST	ART DATE	: <u> </u>	20/00 28/00						SHEET 1 OF 1
					E١	ND DATE	3/	20/UU	Eroowey F	vtona:	on Project	STATION	89+49 "P"	
					JC	B DESCRI	PTION	1-580		xtensi		OFFSET	<u>11.15 LI</u>	
	34				LC	OCATION		ashoe	County, Nev	ada		ENGINEER		
	1 MM		•		BC	ORING	0	39+50			[]	EQUIPMENT	 	
	Ä		7		Е.,	A. #	00)79-01-	5		GROUNDWATER LEVEL			
	ž.	~			GF	ROUND EL	EV15	540.64 ((m)		3/28/00 NE	METHOD	Trackhoe	
					HA	AMMER DR	OP SYS	STEM	IA			BACKFILLED	_Yes DAT	TE 3/28/2000
	ELEV. (m)	DEP (m	י HT ו)	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-	0.91							SC	Moist, medium dense Clayey Sand with app plastic fines, 43% fine to coarse gravel.	e to dense, dark proximately 42% e to coarse sand	brown, b low d, 15% fine	
	1539.64	<u>+</u> 1	1.22	А	GRAB				MC, SA, PI					
										-				
		_									1.52 Moist_very stiff to ha	rd dark brown	Sandy	
			1.83							CL	Lean Clay with appro	ximately 57% m	nedium	
	1538.64	-2	2.13	В	GRAB				MC, SA, PI		2.13 fine gravel.	e to coarse sand	d, and trace	
	1537.64	- - - - 3	3.35							sc	Moist, very dense, da with Gravel with app plastic fines, 35% fin to coarse gravel with cobbles.	ark brown, Claye roximately 35% e to coarse sand approximately §	ey Sand medium d, 30% fine 5% small	
		F .	3 66	С	GRAB				MC, SA, PI		3.66			
			3.00								3.00			
	1536.64	-4												
		-												
		-												
		-												
		-												
	1535.64	-5												
		Ľ												
		_												
	1534.64	-6												
		-												
		-												
		-												
	1533.64	7												
	1555.04	L '												
		_												
5		-												
/11/C		-												
DT 5	1532.64	-8												
T.GI		-												
00		Ľ												
NV N		F												
J.GP.	1531.64	-9												
015		F												
0079		F												
D		+												
NV_C		-												
		_	_	-										

						10	1/22/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	1/23/90						SHEET 1 OF 2
				EI	ND DATE		1 500	 	vtonoio	n Drojant	STATION	<u>89+92 "P"</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	<u>9.76 L1</u>	
	34	~		LC	OCATION		asnoe	Jounty, Nev	/ada		ENGINEER	MG	
	2MM	6		B	ORING	_09	90+00				EQUIPMENT	Peterson	
	Ä			E.	.A. #	00)79-01-5	5		GROUNDWATER LEVEL	OPERATOR	1 6(613011	
	n n n n n n n n n n n n n n n n n n n			G	ROUND EL	EV15	533.50 (m)		DATE DEPTH MELEV. M 10/23/98 NF	METHOD	HQ Core	
			1	Н	AMMER DR	ROP SYS	STEM_F	Rope - Cathe	ead		BACKFILLED	_YesDAT	E10/23/1998
		DEDTU	SA	MPLE	BLOW C	OUNT			11000				
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		0.00)							Moist, very dense, bro	own Clayey Sar	nd with	
		_								75% fine sand. Few c	obbles. Surface	e boulders	
		0.61	в					w, PI, Sv	-	to 3.5 meters.			
		-	А					w, PI, Sv					
	1532.50 -	-1											
		-											
		1.52	2						-				
		_											
	1531.50 -	-2											
		_	C										
		-	Ŭ					w, i i, ov		20.25% modium place	tic finas in zona	e with up	
		-								to 10% gravel.	uc nnes in zone	s with up	
	4500 50	- 3.05											
	1530.50								1				
		_											
		_											
		_	D										
	1529.50 -	-4								Small cobbles occur (0.3 - 0.5 meters	apart.	
		-											
		4.57	,						90				
		4.72	2 E		32	32							
	1528.50 -	5											
		_											
		_											
		-											
		-											
	1527.50 -	6 6.19)										
		_											
		-								Large boulder 0.9 me	ters in diameter	r.	
	1526.50 -	-7	F										
		-											
		-											
1/01		7.71	-		22				-				
5/11	1525.50 -	8 8.02	G		50/127	50/127							
GDT		-											
DOT.		-											
NV_L		-											
- L d E		-											
5D.C	1524.50 -	-9 0.24	L							9.14			
7901		- 3.24							1	Soft to slightly hard, h	ighly weathered	d, grey	
T 00		Ļ								voicamenastie odnus			
DO		_											
Ň													

ſ						10	1/22/08			EXPLORATION LOG				
				ST	ART DATE		1/23/90						SHEET 2 OF 2	
				E١	ND DATE		1/23/98				STATION	89+92 "P"		
				JC	B DESCRI	PTION	1-580		xtensio	on Project	OFFSET	9.76 LT		
	-24			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor		
	1 Mart			BC	ORING	0	0+00				EQUIPMENT	Peterson		
	T.			Ε.	A. #		079-01-5) \			DRILLING			
	Ž.			GI	ROUND EL	EV15	33.50 (m)		10/23/98 NE	METHOD	HQ Core		
				HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead_		BACKFILLED	Yes D	ATE <u>10/23/1998</u>	
İ	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS	
	(m)	(m)	NO. H	TYPE	Increments	300 mm	Recov'd		Group					
		-												
		_												
		10.76							-					
	1522.50 -	-11												
		-												
			Т											
		_												
	1521.50 -	-12								12.10				
		12.19								12.19				
		-												
	1520.50 -	-13												
		-												
		-												
	1519.50 -	- 14												
		-												
		Ľ												
		-												
	1518.50 -	- 15												
		-												
		-												
	1517.50 -	- 16												
		-												
		_												
		-												
	1516.50 -	-17												
		-												
		_												
11/01		-												
)Т 5/	1515.50 -	-18												
JT.GL		Ľ												
		[
Ñ C		-												
5D.GF	1514.50 -	- 19												
79015		F												
.00 L														
DO		Ļ												
ź														
							8/-	11/00			EXPLORATION LOG			
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					ST	FART DATE	<u> </u>	11/00						SHEET 1 OF 1
					E	ND DATE	0/	1 1/00		vtonoir	n Drojaat	STATION	<u>91+15 "P"</u>	
					JC	DB DESCRI	PTION	1-000				OFFSET	324.59 KT	
	- Arr				LC	DCATION				aua		ENGINEER	.ID 2001 C	
	SWW N	e	5		BC	ORING	09		/VQD-4) -				-	
	4 m				E.	A. #		00.47)		DATE DEPTH m ELEV m	DRILLING	Turalla	
	20				GI	ROUND EL	EV. <u>14</u>	60.17 (<u>m)</u>		1.37 1458.8	METHOD		0/44/0000
)		1	HA	AMMER DF	OP SYS		IA			BACKFILLED	Yes DA	TE 8/11/2000
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	1459.17	- - - - - 1	1.52							-	Moist to wet, medium Clayey Sand with 289 fines, 69% fine to coa gravel. Rootmass to interbedded Silty, Cla high water entry durir	dense, dark br % medium plasi arse sand, and 3 152mm. Unit o yey Sand. Moo ng excavation.	own icity 3% fine ontains derate to	
			1.83	4A	GRAB	8			PI, Sv					
	1458.17	-2								30				
	1457.17	- - - - 3												
			3.35							_				
			3.66	4B	GRAB	8			PI, Sv		3.66			
	1456.17	-4												
	1455.17	- 5 -												
	1454.17	- 6 -												
	1453.17	- - - -												
VV_DOT.GDT 5/11/01	1452.17	- - - -												
IV_DOT 0079015D.GPJ N	1451.17	- - - - -												

						10	1/22/09			EXPLORATION LOG			
				S	TART DATE		123/90						SHEET 1 OF 2
				EI	ND DATE		1/23/98				STATION .	91+44 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET .	23.04 LT	
				LC	OCATION	W	ashoe (County, Nev	vada		ENGINEER .	MG	
	Mar	to p		В	ORING	09	91+50				EQUIPMENT .	Acker	
	1 I			E.	A. #	00)79-01-5	5		GROUNDWATER LEVEL	OPERATOR .	Peterson	
	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se			G		_{EV} 15	557.11 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				Ц				Rope - Cathe	ead	10/23/98 NE		Yes DA	те 10/23/1998
										I	BACKI IEEED	UA	
	ELEV.	DEPTH	NO.		150 mm	Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(11)	0.00	-		Increments	<u>300 mm</u>	Recovid			Soft to slightly hard, h	highly weathered	,	
		-								fractured, reddish bro	wn Volcanic Be	drock.	
			А					w, PI, Sv					
		_											
	1556.11	-1 1.07											
		-											
		-											
		-											
		-	В										
	1555.11	<u> </u>											
		2.59							-			-1.	
		- 2.90	С							Hign plastic clay sear	n 0.3 meters thi	СК.	
	1554.11	-3											
		-											
		-	D					w, PI, Sv					
	1553 11	4 4 4 4 4											
		- 4.11							_	4.27			
		-								Very soft and comple	tely weathered N		
		-								Sand.	y of Clayey and	Silly	
		-	Е										
	1552.11	-5											
		5.64							1				
		5.79	F						-				
	1551.11 ·	-6											
		-								Minor harder zones.			
		F	G					w, PI, Sv					
	1550.11 -	1 7											
		- 7.25											
		-											
5		-											
5/11/(-											
DT 5	1549.11	-8	н										
DT.G		Ľ											
Д Д		L											
Ń Z		8.78							-				
D.GF	1548.11	-9								Clay seam.			
9015.		-											
007		F											
DOT		F											
		Γ											

						10	1/22/00			EXPLORATION LOG			
				S	TART DATE	10	123/90						SHEET 2 OF 2
				EI	ND DATE		1/23/90			n Draiaat	STATION	91+44 "P"	
				JC	DB DESCRI	PTION	1-000		xtensi		OFFSET	23.04 L1	
	2m			LC	DCATION			County, Nev	ada		ENGINEER		
	2 Mrs			B	ORING	0	70.04	-			EQUIPMENT	Peterson	
	Ä			E.	A. #		79-01-	D			DRILLING		
	2			G	ROUND EL	EV. 15	57.11 (<u>m)</u>		10/23/98 NE	METHOD	HQ Core	
			N	H.	AMMER DR	OP SYS	STEM	Rope - Cathe	ead		BACKFILLED	Yes DA	ATE 10/23/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION		REMARKS
		- 10.30											
		-											
		_											
	1546.11	-11	J										
		-	Ŭ										
		_											
		_ 11.83							_				
	1545.11	+12											
			L					w, PI, Sv	-				
		_	к										
		_								Clishthy bandan with Is			
	1544.11	-13								Siightiy harder with le	ess weathening.		
		13.35							_				
		_											
		-	М										
	1543.11	+14 14.17	,							14.17			
		_											
		_											
		_											
	1542.11	-15											
		-											
		-											
		-											
	1541.11												
		_											
		-											
	1540 11	- 17											
	1340.11	- "											
		-											
/01		-											
5/11,	1539 11	-18											
GDT	1000.11												
DOT.		-											
N		Ē											
.GPJ	1538.11	<u> </u>											
3015E		-											
\$200		-											
DOT													
Ž													

						11	/8/08			EXPLORATION LO	G		
				S	FART DATE	11	/12/09						SHEET 1 OF 4
				E	ND DATE		12/90	 Ereewov E	vtonci	n Droigot	STATION	<u>92+90 "P"</u>	
				JC	DB DESCRI	PTION	1-500		xtensi		OFFSET	5.55 LT	
	100			LC	DCATION			Jounty, Nev	ada		ENGINEER	Acker	
	1 Mart			BC	ORING	0	3+00					Peterson	
	The second second second second second second second second second second second second second second second se			E.	A. #		079-01-5	<u>)</u>					
	Ľ	1		GI	ROUND EL	EV. 15	58.21 (m)		11/12/98 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	Yes D	ATE <u>11/12/1998</u>
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIA		J	REMARKS
	(m)	(m)	A		Increments	300 mm	Recov'd		Gioup	Hard, highly frag	tured to slightly frag	ctured.	Placed casing to
		- 0.00								slightly weather	ed to weathered, gro	ey	1 meter - no
										Andesite Bedro	CK.		sample recovered.
		- 0.91											
	1557.21	-1	В						-				
		-											
		-											
		Ľ											
	1556.21	-2											
		-											
		_ 2.44	С						-				
		-											
	1555 21	3											
	1000.21	ļ											
		-											
		-											
	1554.04	3.96	D										
	1554.21	4											
		4.42	Е					w, PI, Sv,	-			0.04	
		-						50		meters thick. Hi	d, pinkish red Clay	seam 0.24 attered rock	
		4.94	F							around seam.			
	1553.21	_5											
		-								Moderately fract	ured.		
		- 5.70	C										
		-	9					w, r 1, 3v					
	1552.21	-6								Highly froatured	to obottored with th	in Clay	
		6.46								seam at 6.4 me	ers.	in Clay	
		-	Н						1				
		-											
	1551.21	-7								Slightly to mode	rately fractured fror	n 7 - 9.7	
										meters.	-		
		L											
11/01		- 7.00											
)Т 5/	1550.21	-8 7.99							-				
T.GL		-											
/_DC													
ر ۲		_											
D.GF	1549.21	-9											
9015													
- 007		- 9.45	J					w, PI, Sv	-				
DOT		9.75	к						-	Lighty fronting of	with zonce of at -	arad rack	
N										Hignly fractured	with zones of shatt	erea fock	

						11	/8/98			EXPLOF	RATION	I LOG			
				S		11	/12/08							00.00 " D"	SHEET 2 OF 4
				E	ND DATE		12/90		vtonci	n Project			STATION	<u>92+90 "P"</u>	
				JC	DB DESCRI	PTION	1-500		xtensi	DITFIOJECI			OFFSET	5.55 L1	
	24			LC	DCATION		asnoe (Jounty, Nev	ada				ENGINEER		
	1 Wat			BC	ORING	0	3+00	-						Peterson	
	Z.			E.	A. #		079-01-5	<u>)</u>				LEVEL			
	te			GI	ROUND EL	EV15	58.21 (m)		11/12/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead				BACKFILLED	Yes DA	ATE 11/12/1998
	ELEV.	DEPTH	SA	MPLE	BLOW C	OUNT	Percent		USCS		ΜΔΤΕ				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group					ro	
		-								VVI	iui ciay ii	inning non	19.7 - 12.9 mete	515.	
		-													
		- 10.67	L					w, PI, Sv	-						
	1547.21	-11													
		-													
		-													
		-													
	15/6 21	- 12													
	1040.21														
		-													
		-													
	4545.04	-													
	1545.21									Hi	ighly frac ccur on 6	ctured - no 3 - 15 cm, i	clay infilling. Fra ntervals at 15-30	actures degrees.	
		_												o dog.oool	
		-													
		-													
	1544.21	14													
		-													
		-													
	1543.21	- 15													
		_								CI	lav infillir	na 1cm in	45 degrees fract	ture	
		-										ig rom in			
	1542.21	-16													
		Ĺ								M	oderatel	y fractured			
		Ĺ													
		_								12	hattered	zone with	clav dominant 0	.15 meters	
	1541.21	-17								th	ick.	20110 11111			
		-													
11/01		L													
T 5/1	1540.21	-18													
T.GD		-													
DO		-													
NN		[
D.GP.	1539.21	-19								М	oderatel	y to highly	fractured - no cl	ay infilling.	
<u>9015I</u>		_												-	
3200		-													
DOT		Ľ													
NN															

						11	/0/00			EXPLORATION LOG			
				ST	FART DATE	<u> </u>	10/90						SHEET 3 OF 4
				El	ND DATE		/12/90	 		n Droiset	STATION	92+90 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	5.55 LI	
				LC	OCATION		ashoe (County, Nev	ada		ENGINEER	Ackor	
	1 Mm			BC	ORING	09	3+00				EQUIPMENT	Peterson	
	4			E.	A. #	00	79-01-5)		GROUNDWATER LEVEL			
	He .	1		GI	ROUND EL	EV. 15	58.21 (m)		11/12/98 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	_YesDA	TE <u>11/12/1998</u>
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_								Highly fractured with	clay infilling.	infilling to	
		-								22.5 meters.	with minor clay		
		-											
	4507.04	-											
	1537.21	1											
		_											
		-											
		-											
	1536.21	-22											
		-								Shattered from 22.5 t	o 32.5 meters v	vith clay	
		-								seam at 22.8 meters.			
	1535.21	-23											
		-											
		-											
	1534.21	-24											
		-											
		-											
	1533.21	25											
		_											
		-											
	1532.21	-26											
		È											
		Ĺ											
		-											
	1531.21	-27											
		F											
		[
11/01		F											
T 5/	1530.21	-28											
T.GD		F											
/_DO		Ľ											
NN L		F											
D.GF	1529.21	-29											
79015		F											
T 00.		Ĺ											
DO		Ļ								Highly fractured zone	with 0.5 cm. cl	ay infilling.	
Z			1										

ſ						11	/0/00			EXPLORATION LOG			
				ST	ART DATE	<u> </u>	/0/90						SHEET 4 OF 4
				EN	ND DATE		/12/98				STATION	<u>92+90 "P"</u>	
				JC	B DESCRI	PTION	1-580		xtensic	on Project	OFFSET	5.55 LI	
	24	~~~		LC	CATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
	2WM	6		BC	DRING	0	03+00		[EQUIPMENT	Peterson	
	-			E.,	A. #		079-01-5) \		GROUNDWATER LEVEL	DRILLING		
	2c			GF	ROUND EL	EV15	58.21 (m)		11/12/98 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead		BACKFILLED	_YesD	ATE <u>11/12/1998</u>
ľ	ELEV.	DEPTH	SAN	MPLE	BLOW CO	OUNT	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group				
		-											
		-											
	1527.21	-31											
		-								Thin clay seam.			
		-											
	1526.21 ·	-32											
		-								32.31			
		-											
	1525.21	-33											
		-											
		-											
	1524.21	-34											
		-											
		-											
		_											
	1523.21	-35											
		-											
		_											
	1522.21 ·	-36											
		-											
		_											
	1521.21 ·	-37											
		-											
1/01		_											
Τ 5/*	1520.21	-38											
T.GD		-											
		Ĺ											
N N													
D.GF	1519.21	-39											
79015		-											
T 00		Ē											
DO		_											
ź													

						10	/22/08			EXPLORATION LOG			
				S	TART DATE	10	/22/08						SHEET 1 OF 2
				El	ND DATE		1 590	 Eroowov E	vtonci	on Project	STATION	94+15 "P"	
				JC	DB DESCRI	PTION	1-060				OFFSET	3.53 RT	
	54			LC	DCATION		asnoe (Jounty, Nev	ada		ENGINEER		
	2WM			BO	ORING	09	4+10	_		[]	EQUIPMENT	Peterson	
	Ą			E.	A. #	0	79-01-5))					
	Ž.			G	ROUND EL	_{EV.} _15	53.05 (m)		10/22/98 NE	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM _ R	lope - Cathe	ead		BACKFILLED	Yes DA	TE <u>10/22/1998</u>
ľ	ELEV.	DEPTH	SAI	MPLE	BLOW CO	DUNT	Percent		USCS				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB 11313	Group			dama	REMARKS
		0.00								grey brown Silty Grav	it, dense to very velly Sand with	dense,	
		-								moderately hard cobl	bles and small b	oulders	
			А					w, PI, Sv			e son mass.		
	1552.05	_ 1											
		- 4.07											
		- 1.37							-				
		- 1.83	В										
	1551.05	2							-				
	1001.00	-											
		-	C										
		2.74											
	4550.05												
	1550.05	_ 3											
		_	D					w, PI, Sv					
		-											
		3.96											
	1549.05	4											
		-	F										
		-	-										
		- 4.88							-				
	1548.05	-5											
		-	F										
		-											
	1547.05	-6											
		6.40											
		-							~				
		-							SM				
	1546.05	-7	G					w, PI, Sv					
_		_ 7.62							-				
'11/0'		-											
DT 5/	1545.05	-8	ц										
DT.GI			п										
		- 8.69											
N N		-							1				
5D.G	1544.05	-9											
7901		-											
1 00		F						W, PI, SV					
D0		_											
ź													

						. 10	1/22/08			EXPLO	ORATIO	N LOG			
				S	FART DATE	<u> </u>	1/22/30							o	SHEET 2 OF 2
				El	ND DATE		1 500	Eroower 5	vtona	n Proise	. +		STATION	<u>94+15 "P"</u>	
				JC	DB DESCRI	PTION	1-580		xtensio	on Projec	л 		OFFSET	<u>3.53 RT</u>	
	da.			LC	OCATION			Jounty, Nev	aua				ENGINEER	Acker	
	2Mm			BO	ORING	0	94+10 70.04]		Peterson	
	Z.			E.	A. #		079-01-	D							
	te			G	ROUND EL	EV15	53.05 (m)		10/22/98	NE		METHOD	HQ Core	
				H	AMMER DR	OP SYS		kope - Cathe	ead				BACKFILLED	Yes DA	TE10/22/1998
	ELEV.	DEPTH	SA	MPLE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m) 10.15	110.		Increments	300 mm	Recov'd		Cioup						
		_													
		-	.1												
	1542.05	-11	Ŭ												
											Verv few	arge cobbl	es.		
		_ 11.64									- , -	<u>.</u>			
		F													
	1541.05	- 12													
			ĸ												
		-													
		-													
	1540.05	⁻¹³ 13.17													
		_								13.41					
		-									Moist, me Silty Grav	dium dense relly Sand \	e to dense, grey with estimated 1	to brown 0%	
		-	L								non-plasti	c fines, 70%	% fine to coarse	sand, 20%	
	1539.05	14									siltier san	d. Few volc	anic cobbles.		
		-													
		- 14.69							-						
	1520.05	-													
	1536.05	- 15.30	IVI												
		-							-						
		-													
	1527.05	- 16							SM						
	1557.05		N												
		-													
		16 82													
	1536.05	-17							1						
		-													
/01		F	0												
5/11	1535.05	-18													
GDT.		- 18.29	Р					W DI SV							
DOT		_ 18.44						w, i i, ov		18.44					
N		F													
D.GP.	1534.05	-19													
9015L		F													
200		F													
DOT		F													
N															

						10	/22/08			EXPLORATION LOG		
				S	TART DATE	10	122/90					SHEET 1 OF 1
				El	ND DATE		1/22/98	 		n Ducie at	STATION	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET 7.10 RI	
	Der			LC	OCATION		ashoe (County, Nev	/ada		ENGINEER Mig	
	2Wm	6		B	ORING	09	6+00			[]	EQUIPMENT Acker	
	Ä			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	
	n de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía			G	ROUND EL	EV15	40.81 (m)		DATE DEPTH m ELEV. m 10/22/98 NF	METHOD HQ Core	
			1	H	AMMER DR	OP SYS	STEMR	Rope - Cath	ead		BACKFILLED Yes	ATE 10/22/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION	REMARKS
	(,	0.00	A		Increments	500 1111	INCOV U	w, PI, Sv		Slightly moist, hard, h	prown Sandy Gravelly	
									CL	Clay colluvium.		
		0.61	I B					w, PI, Sv	-	0.76		
		-								Moderately hard, wea	athered, fractured, grey	-
	1539.81	-1								< Hornblende And	desite Bedrock.	
		-										
		-										
	1538.81 ·	-2										
		-										
		-										
		Ľ										
	1537.81	-3										
		-										
		-										
		-										
	4500.04	-								3.96		_
	1536.81	4								Very soft to soft, com	pletely weathered,	
		-								Clayey Sand and Gra	avel.	
		-										
		-										
	1535.81	-5										
		Ľ										
		-										
	1534.81	-6								6.10 High plastic clay sea	m.	
		+								Soft to very soft, com	pletely weathered, brown	
		Ľ								30-40% medium plas	stic fines, 50-60% fine to	
		Ļ								coarse sand, 10% gr	avel.	
	1533.81 ·	-7										
		-										
		-										
/01		-										
5/11,	1532.91	8								Horder with former als	w finon	
3DT	1002.01										iy intes.	
JOT.(-										
NV_E		-										
- L d E		+										
15D.(1531.81	-9								9.14		1
0620		Ļ										
DT 0		-										
V_D(-										
z		1	1	1	1		1	1				

						10	1/21/08			EXPLORATION LOG			
				S	TART DATE	10	1/21/00						SHEET 1 OF 1
				EI	ND DATE		1 500	 Eroowov E	vtonoi	n Braiaat	STATION	<u>97+42 "P"</u>	
				JC	DB DESCRI	PTION	1-500		xtensi		OFFSET	22.65 RT	
	104			LC	DCATION			Jounty, Ne	ada		ENGINEER	Acker	
	2 Mart	615		B	ORING	0	97+50]	EQUIPMENT	Peterson	
	Ĩ,			E.	A. #	00)79-01-8	5		GROUNDWATER LEVEL			
	ž.			G	ROUND EL	EV15	542.39 (m)		10/21/98 NF	METHOD	HQ Core	
			1	H	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_YesDAT	E10/21/1998
	ELEV.	DEPTH	SA NO.	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(11)	0.00)		Increments	<u>300 mm</u>	Recov'd			Slightly hard to mode	rately hard, wea	athered,	
		-								Breccia.	, ie g.e.		
		-	А					w, PI, Sv					
	4544.00												
	1541.39	1.22	2										
		- 1.52	,										
		-	C					w, PI, Sv	1				
		-	в										
	1540.39	-2											
		-								Soft to slightly hard, li	ight grey and hi	ghly	
		2.59)							weathered.			
		-	_										
	1539.39	-3	D										
		3.20							-				
		-	Е										
		3.81											
	1538 39	4							1	3.96			
	1000.00	- ·								brown Volcanic Bedro	ock. Consisten	cy of silty	
		-								to clayey gravelly san	d.	5	
		-	F										
	4507.00	-											
	1537.39	 											
		- 5.33	5						-				
		-	G										
		- 5.94	4										
	1536.39	-6	ц						Ī	6.10 Oliotative based to see door			
		6.37	,						1	Breccia.	rately hard voi d	canic	
		_	1							6.55 Soft completely west	borod Volcania	Bodrock	
		_ 6.83							4	Son, completely wear		Beulock.	
	1535.39	+7 7.13	J							Very soft clay zone 0	3 meters in this	skness	
		-							1	Clay consists of 90-10	00% high plasti	c fines -	
		-	К							ppm = 0.5			
1/01		7.74	-						4				
5/1	1534.39	-8											
GDT.		-											
DOT		-	1										
N		-	-										
GPJ	1522 20												
115D.	1000.09	- 9.27	,							9.27			
0290		-											
Ō		-											
		-											
_													

ſ							3/	23/00			EXPL	ORATIO	N LOG			
					ST	ART DATE	<u> </u>	23/00								SHEET 1 OF 1
					E١	ND DATE	3/.	23/00	 Eroowov E	vtonoic	n Droio	~ +		STATION	<u>97+98 "P"</u>	
					JC	B DESCRI	PTION	1-000		xtensit	nrioje	<i>.</i>		OFFSET	20.01 RT	
	2m				LC	CATION		asnoe	Jounty, Nev	/ada				ENGINEER		
	2 Mart	0	3		BC	ORING	0	98+00	_					EQUIPMENT	 Tim	
	Ä		-		E./	A. #	0	079-01-5	<u>,</u>		GROU					
	2				GF	ROUND EL	EV15	540.39 (m)		3/23/00	NE		METHOD	Trackhoe	
					HA	AMMER DR	OP SYS	STEM	IA					BACKFILLED	_YesD	ATE 3/23/2000
ľ	ELEV. (m)	DEF (m	PTH 1)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		_								SC	0.30	Moist, me brown, C	edium dense layey Sand	e to very dense, with Gravel with	dark າ	
		_										40-45% f	ine to coars avel with ar	edium plastic fil e sand, 20-25% provimately 5-1	nes, fine to 0% small	
	1520.20	-	0.91							GC		cobbles.				
	1539.39		1.22	А	GRAB							Sand with	ry dense, br h 17% medi	own, Clayey Gr um plastic fines	, 30% fine	
		-									1.37	to coarse	sand, 53%	fine to coarse g	ravel with \int	Material
		-								GP		Moist, ve	ry dense, br	own, Poorly Gr	aded	difficult to
	1538.39	-2	1.83	В	GRAB				MC, SA, PI,	GC	0.40	Gravel w plastic fin	ith Clay and nes, 30% fin	I Sand with 12% e to coarse san	6 medium d , 58% fine	excavate below 1.2 meters.
		-	2.13						R-VAL.		2.13	to coarse to large c	gravel with obbles.	approximately	10% small	
		_														
		-										Excavato fresh. uni	r Refusal at fractured. vo	2.1 meters (Ve lcanic bedrock)	ry hard,	
	1537.39	-3										,				
		-														
		-														
	1536.39	-4														
		-														
		-														
	1535.39	-5														
		Ľ														
		-														
	1534.39	-6														
		Ē														
		_														
		-														
	1533.39	+7														
_		_														
/11/0		-														
DT 5	1532.39	-8														
DT.GI																
⊇		-														
A Lư		-														
5D.G	1531.39	-9														
10620																
0 TC		-														
D N		-														

						Q/·	11/00			EXPLC	RATIO	N LOG			
				S	TART DATE	<u> </u>	11/00								SHEET 1 OF 2
				El	ND DATE		14/99		vtonci	on Projec	+		STATION	<u>98+27 "P"</u>	
				JC	DB DESCRI	PTION	1-000				L		OFFSET	<u>1.10 L1</u>	
	- Arr			LC	DCATION			Journy, Nev	aua				ENGINEER	Acker	
	SWW N			B	ORING	09	70 04 0	-		00010				Peterson	
	4 m			E.	A. #		10.00 ()					DRILLING		
	2c			G	ROUND EL	EV15	43.09 (m)		9/14/99	NE		METHOD	HQ Core	0/4 4/4 000
			N	H	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead				BACKFILLED	_YesD	ATE 9/14/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	1542.09	- - - -									Grey, hard fractured, Clay fract predomina Steeply di	d to very ha Pyroclastic ure filling. F ately horizo ipping to ve	rtical fractures.	/ close or Sandy n is lipping.	
		- 1.52	2												
		1.83	A	SPT	15 50/76	50/76	50								
	1541.09 ·	-2													
		-													Loss of
		_ 2.44		0.07	27				-						circulation
		2.74	В	SPI	50/76	50/76	50								Circulation not
	1540.09	-3													throughout
		-													remaining length
		-													or noie.
		-									Steeply di	ippina to ve	rtical fractures t	o 13 feet.	
	1539.09	4										pping to to			
	1000.00														
		-													
		-													
	1520.00	-									Steenly di	innina to ve	rtical fractures		
	1536.09	-3													
		-													
		-													
		-													
	1537.09	-6									Stoophy di	inning to vo	rtical fractures		
											Steepiy u	ipping to ve	nical naciones.		
		-													Drill string
		-													advanced
	1536.09	-7													feet.
11/01		-													
JT 5/	1535.09	-8								:	Steeply di	ipping to ve	rtical fractures.		
JT.GE		F								,	Very close	e fractured	to shattered to 3	36 feet.	
		[Abundant	manganes	e oxide coating	on fracture	
ي ۲		F									54110053.				
5D.GF	1534.09	-9													
79015		-									Moderate	ly hard to h	ard to 36 feet.		
T 00		Ľ													
DO		Ļ													
≥										1					

						0/-	14/00			EXPLO	ORATIO	N LOG			
				ST	ART DATE	<u> </u>	14/99								SHEET 2 OF 2
				E١	ID DATE	9/	14/99	 		n Draiae			STATION	<u>98+27 "P"</u>	
				JC	B DESCRI	PTION	1-060		xtensio	n Projec	1		OFFSET	<u>1.10 LI</u>	
	54			LC	CATION		asnoe (Jounty, Nev	ada				ENGINEER		
	2Wml			BC	ORING	09	8+30		r]	EQUIPMENT	Peterson	
	The second second second second second second second second second second second second second second second se			Ε.	A. #		19-01-5) \					DRILLING		
	1.			GI	ROUND EL	EV15	43.09 (m)	<u> </u>	9/14/99	NE		METHOD	HQ Core	
				HA	MMER DR	OP SYS	STEM _R	tope - Cathe	ead				BACKFILLED	Yes DA	TE 9/14/1999
	ELEV.	DEPTH	SAN		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(11)	(11)			Increments	300 mm	Recovid								
		_													
		_													
		-								10.97					
	1532.09	-11													
		_													
		-													
		-													
	1531.09	-12													
		_													
		-													
	4500.00	-													
	1530.09	-13													
		-													
		-													
	1520.00	L_11													
	1020.00	-													
		-													
		-													
	1528.09	-15													
		-													
		-													
	1527.09	-16													
		-													
		-													
		_													
	1526.09	-17													
		-													
		-													
1/01															
F 5/1	1525.09	-18													
LGD1		-													
DO		F													
NN r		Ę													
D.GP.	1524.09	-19													
9015		-													
T 007		L													
		L													
Ž															

						0/	13/00			EXPLORATION LOG			
				S	TART DATE	=	1//00						SHEET 1 OF 4
				E	ND DATE	9/	14/33		vtenci	n Project	STATION	98+52 "P"	
				J	OB DESCR		1-500		vodo		OFFSET	4.95 K I	
	- Am			L	OCATION		a51108 (Journy, Nev	aud		ENGINEER	Acker	
	A MAN	C A		В	ORING	0	70 01 6					Peterson	
	1 miles			E	.A. #		019-01-0 04 07 () m)		DATE DEPTH m ELEVEL	DRILLING		
	le			G	ROUND EL	EV13	534.27 (m)		9/14/99 NE	METHOD		0/4 4/4 000
				Н	AMMER DF	ROP SYS	STEM	cope - Catho	ead		BACKFILLED	Yes DA	TE9/14/1999_
	ELEV.	DEPTH	I SA		BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(11)				Increments	<u>s 300 mm</u>	Recova			Red brown, dry to slig soft, completely weat altered Metasedimen mechanical propertie Sand.	ghtly moist, very hered, hydrothe tary Bedrock w s of a Sandy Cla	r soft to rmally ith the ay/Clayey	
	1533.27	-1											
		- 15	2										
		-			12				-				
		- 1.9	A 8	SPT	19 27	46	100	w, PI, Sv					
	1532.27	-2							1				
		2.4	4										
		-	В	SPT	13 24	56	100	w, PI, Sv					
	1531.27	- 2.8			32				-				
		-								3 35			
	1530.27	- - - - - - - - - - - - - - - - - - -	16 C 2	SPT	19 24 27	51	100	w, PI, Sv	-	Variably colored, very (variable), severely to Metasedimentary La Light grey to olive gre fractured to shattered	y soft to modera completely we ndslide Deposit y/green, very c to 28 feet.	tely hard athered s . ose	
	1529.27	- 5 	.9										
		-	_		20				-				
		- 5.9	4 D	SPT	30	74	100						
	1528.27	6 - - -							-				
	1527.27	7 7.0	1						_				
		7.3	2 E	SPT	36 56/127	56/127	60						
		-							1				
PJ NV_DOT.GDT 5/11/01	1526.27	- - - - - - - - - - - -	3 F	SPT	24 25 52	78	75		-	Olive grey, very soft t fracture filling to 33 fe	o soft, with red eet.	Sandy Clay	
NV_DOT 0079015D.GI	1525.27	- - - -			53								

							13/00			EXPLORATION LOG			
				S	TART DATE	= <u>-</u> 9/	14/00					00 50 "5"	SHEET 2 OF 4
				El	ND DATE	9/	1-520	Ereeway E	vtoncia	n Project	STATION	98+52 "P"	
				JC	OB DESCRI		1-000				OFFSET	4.95 K I	
	and and			LC	DCATION		18150	Journy, Nev	aua			Acker	
	W.W.W			B	ORING	0	70 01 6					Peterson	
	1			E.	.A. #		24.07 () m)		DATE DEPTH m ELEV. m	DRILLING		
	V			G	ROUND EL	EV15	034.27 (m) Nama Cathu		9/14/99 NE	METHOD		0/11/1000
				H	AMMER DR	ROP SYS	STEM	tope - Cathe	ead		BACKFILLED	res DA	ATE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		10.06	G	SPT	32	50/76	75		-	Color change to brow	n to olive grey (mottled).	
		- 10.36			50/76				-				
		-											
	1523.27 -	- 11											
	1020.21	-											
		11 59											
		-	н	SPT	22	50/76	75		1	Abundant small fractu	res filled with ve	ery soft,	
	1522.27 -	- 11.89 - 12			50/76				-	red Sandy Clay to 48	feet.		
	1022.21	-											
		_											
		-											
	1521 27 -	- 13											
	1321.27	_ 13											
		_											
		-											
		-											
	1520.27 -	14											
		_											
		-											
		-											
	1519.27 -	- 15											
		_											
		-											
		-											
	1518.27 -	16											
										Abundant FeOx in fra properties of a Sandy	ctures; Material Clay.	has the	
		_									- 7		
		-								Highly fractured to sha	attered to 60 fee	ət.	
	1517.27 -	-17											
		[
÷		-											
/11/0		+											
DT 5,	1516.27 -	- 18 _{18.14}	-						1				
DT.GI		- 18.29		SPT	50	50	100		-	Soft with shallow to m	oderatelv dinnir	na	
N_D		-								fractures to 71 feet.		· J	
P N		-											
5D.G	1515.27 -	- 19											
7901													
)Т 00		-											
V_DC		19.81			24				-				
ź		1			24	1							

						Q/-	13/00			EXPLO	ORATIO	N LOG			
				S	TART DATE	= <u> </u>	1 / / 00								SHEET 3 OF 4
				EI	ND DATE		14/99		vtonci	on Projo	~ +		STATION	<u>98+52 "P"</u>	
				JC	OB DESCRI		1-000		xterisi	on Projec	<i>.</i>		OFFSET	4.95 K I	
	24			LC	OCATION			Jounty, Nev	ada				ENGINEER		
	2Mrd	e s		B	ORING	09	8+52						EQUIPMENT	Peterson	
	Ą			E.	A. #	00	079-01-5)		GROU					
	2c	~		G	ROUND EL	.EV15	34.27 (m)		9/14/99	NE		METHOD	HQ Core	
				H.	AMMER DF	ROP SYS	STEM _ R	lope - Cathe	ead				BACKFILLED	_YesD	ATE 9/14/1999
	ELEV.	DEPTH	SA	MPLE	BLOW C	OUNT	Porcont		USCS		MATI		SCDIDTION		DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD TESTS	Group						REWARKS
		20.12	J	SPI	50/102	50/102	/5		-						
		-													
		-													
	1513 27 -	-21													
		-													
		-													
		21.64	K	SPT	50/140	50/140	50		-		Soft with o	coloring as	above with sma	ll zones of	
	1512.27 -										dark grey,	moderatel	y hard, severely	weathered	
	1012.27										filling to 8	Moderate r 0 feet.	ed Sandy Clay f	racture	
		-									Ū				
		-													
	4544.07	-													
	1511.27 -	23									Oto and a di		all and free allowers of	. 77 (
		_									Steeply di	pping to ve	rtical fractures t	o // teet.	
		-													
		-													
	1510.27 -	-24													
		_													
		-													
		-													
	1509.27 -	-25													
		_													
		-													
		-													
	1508.27 -	-26													
											Color cha	nge to light	brown.		
		_													
		-													
	1507.27 -	-27													
		[
Ĺ		_													
/11/0		-													
DT 5.	1506.27 -	-28													
DT.G															
D_ □		_													
P_N		-													
5D.G	1505.27 -	-29									Dark grey	, moderate	y hard to hard,	severely	
7901											weathered	a metavolca , soft.	anic rock to 97 fe	eet, then	
ЧТ 00		-									5 - 5	•			
		_													
ź			<u> </u>												

						. q/	13/99			EXPL	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	14/00								SHEET 4 OF 4
				E	ND DATE	9/	14/99	 Ereewey E	vtonoio	n Droio	~ +		STATION	<u>98+52 "P"</u>	
				JC	DB DESCRI	PTION	1-000		vodo	пгюје	<i>.</i>		OFFSET	4.95 K I	
	200			LC	DCATION			Journy, Nev	aua				ENGINEER	Acker	
	W.M.			BC	ORING		70 04 5		[0000				Peterson	
	The second second second second second second second second second second second second second second second se			E.	A. #		079-01-0)					DRILLING		
	20			GI	ROUND EL	EV15	034.27 (I	m) ana Oath	[9/14/99	NE		METHOD	HQ Core	0/4 4/4 000
		N	N	HA	AMMER DR	OP SYS	STEM R	ope - Cathe	ead				BACKFILLED	Yes DA	TE 9/14/1999
	ELEV.	DEPTH	SA		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	<u>300 mm</u>	Recov'd		Cloup						
											Grey to da	ark grey, mo	derately hard to	o hard,	
		_								30.72	Shallereu	metavoicai	IIC IUCK.		
		-								00.12					
	1503.27	31													
		_													
		-													
	1502.27	-32													
		-													
		_													
	1501.27	33													
		_													
		_													
		-													
	1500.27	34													
		-													
		_													
	1499.27	-35													
		-													
		_													
		-													
	1498.27	-36													
		_													
		_													
	4 407 07	-													
	1497.27	-37													
		_													
10		-													
5/11/	4 400 07	-													
DT	1496.27	-38													
DOT.G		-													
		F													
GPJ	4 405 65	-													
15D.	1495.27	- 39													
06200		-													
ÓT C		+													

							. 10)/14/98			EXPLO	ORATIO	N LOG			
					ST		10)/1 <u>4/</u> 98							00.00 ""	SHEET 1 OF 2
					E١			<u>יי ו אין אין אין אין אין אין אין אין אין אין</u>	Freeway E	vtenci	n Projec	` †		STATION	<u>98+98 "P"</u>	
					JC	DB DESCRI	PTION	ashoo (vada				OFFSET		
	200				LC	DCATION			Journy, Nev	aud				ENGINEER	Acker	
	× ×				BC	ORING	0	70 04 1	5		0001				Peterson	
	<i>A</i>	<u>S</u>			Ε.	A. #		20 05 /) m)		DATE			DRILLING		
	le			_	GI	ROUND EL	EV15	038.85 (-			10/14/98	NE		METHOD		40/44/4000
					HA	AMMER DR	OP SYS		kope - Cathe	ead			L]	BACKFILLED	Yes DAT	TE10/14/1998
	ELEV. (m)	DEPT (m)	H N	SAN IO.	1PLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		0.	00	A					w, PI, Sv	SM	0.15	Moist, loo	se, brown S fines, topso	Silty Sand with lo il.	w /	
		-										Soft to mo	derately ha	ard, highly weath	nered,	
		-										crumbles	to sandy sil	t-silty sand soil.	Original	
	1537.85 -	- 1										rock struc	ture not we	Il preserved due	e to	
		-										fractures.	Few basal	t fragments pres	sent.	
		1.	52													
		-							W, FT, OV							
	1536.85 -	2														
		-														
		-														
		F														
	1535 85 -	_3														
	1000.00	-														
		-														
		-														
	1534 85 -	4														
	1007.00	-														
		-														
		-														
	1533 85 -	-5														
		Ļ										Highly fra	ctured below	w to EOH.		
		-														
		-														
	1532.85	-6														
	1002.00	Ļ														
		-														
		-														
	1531.85	-7										Dark volc	anic fragme	ents.		
	1001.00	_											5			
		-														
01		-														
5/11/	1530 95 -	-														
GDT	1000.00	-														
)OT.(_														
NV_L		-														
GPJ	1500.05	-														
015D.	1529.85	-9														
00790		-														
OT (-									9.60	Soft to me	oderatelv ha	ard, highly fractu	ired, hiahlv	
NV_C		_										weathered	d and altere	d, green-brown	to	

						10	/1//08			EXPLORATION LOG			
				ST	FART DATE	10	/1 / 09						SHEET 2 OF 2
				E	ND DATE		1 5 90	 Eroowov E	vtonoio	n Drojaat	STATION	<u>98+98 "P"</u>	
				JC	DB DESCRI	PTION	1-500		vodo		OFFSET	<u>7.44 KI</u> SDB	
	-pm			LC	DCATION			Journy, Nev	aua		ENGINEER	Acker	
	A MAN	6		BC	ORING	0	9+00	-	[Peterson	
	4			E.	A. #		079-01-5)		DATE DEPTH m ELEV m	DRILLING	110.0	
	20	/		GI	ROUND ELI	EV15	58.85 (m)		10/14/98 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM	tope - Cathe	ead		BACKFILLED	YesDA	TE 10/14/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	h Fasilia d	REMARKS
		-								crumbles to silty sand	with gravel. F	racture	
		-								surfaces highly altere	d with extensive	e FeOx	
		_								<u>otannigi</u>		/	
	1527.85	-11											
		-											
		-											
	1526.85	-12											
		-											
		-											
		_											
	1525.85	-13											
		-											
		_											
	1524.85	-14											
		-											
		-											
	1523.85	- 15											
		-											
	1522.85	-16											
		-											
		Ĺ											
		_											
	1521.85	-17											
		-											
		Ĺ											
11/01		F											
Τ 5/	1520.85	+18											
T.GD		F											
D0		Ľ											
ر ۲		F											
5D.GF	1519.85	- 19											
79015		F											
T 00		Ĺ											
DO		F											
ź							1						

							_ <u>0</u> /·	12/00			EXPLORATION LOG			
					S		= <u>-9/</u>	12/33					00.00 """	SHEET 1 OF 2
					El	ND DATE		12/33		vtenci	n Project	STATION	99+06 "P"	
					JC	OB DESCR		086-1				OFFSET		
	200				LC	OCATION			Jounity, INE	aua		ENGINEER		
	1 WW	2			B	ORING	09	9+05				EQUIPMENT	Peterson	
	Ą				E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	ž.	7			G	ROUND EL	EV15	642.04 (m)		9/12/99 NE	METHOD	HQ Core	
			1		H	AMMER DF	ROP SYS	STEMR	Rope - Cathe	ead		BACKFILLED	_Yes DA	TE9/14/1999
ł	ELEV/	DEDI	гн	SAI	MPLE	BLOW C	OUNT	D (11909				
	(m)	(m)		NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		0	.00	A					w, PI, Sv		Soft, completely weat grev Metasedimentar	thered, disturbe v Landslide De	d, green	
		-									g. c y	,	poono.	
		-												
	1541.04	1												
	1541.04	[
		- 1	.52											
		-		_	a	29				1				
		- 1	.98	В	SPT	33 37	70							
	1540.04	-2				0.					Slightly hard to mode	rately hard zone	e 0.5	
		2	.44								meters thick.			
		-		~	ODT	14	50							
		- 2	.90	C	SPI	27	52							
	1539.04	-3 ³	.05	D					w, PI, Sv					
		-												
	1538.04	-4 -4	.96			29				-				
		-	40	Е	SPT	23	50							
		4	.42			27				-				
		Ľ									1 99			
	1537.04	-5									Soft to slightly weather	ered, shattered,	grey to	
		5	.18			29				-	brown grey Metasedi	mentary Bedro	ck.	
		- 5	.49	F	SPT	50	50							
		-												
	1536.04	6 6	10											
	1550.04	- 0 0	.10	G					w, PI, Sv	-				
		F												
		F												
		_ 7	.01								7.01			
	1535.04				0.5-7	31					Soft, completely weat	hered, highly fr	actured,	
		- 7	.47	н	SPT	29 34	63				light grey Metavolcan	nc Bedrock.		
_		-								1				
/11/0		F												
DT 5.	1534.04	-8												
DT.GI		Ľ												
		8	.53			27				-				
ž Z		_ 8	.84	Ι	SPT	50/140	50/140			1				
D.G	1533.04	-9												
9015		F									A.I. 1			
700		Ľ									Altered to medium pla color to bottom of hol	astic Sandy Cla e.	y with tan	
БОД		F												
≥														

						0/	12/00			EXPL	ORATIO	N LOG			
				STAR	T DATE	<u> </u>	12/99								SHEET 2 OF 2
				END [DATE	9/	12/99			Б.			STATION	99+06 "P"	
				JOB D	DESCRI	PTION	1-580	Freeway E	xtensio	on Proje	Ct		OFFSET	7.5 LT	
				LOCA	TION	V	ashoe (County, Nev	ada				ENGINEER	MG	
	1 M			BORI	NG	_09	9+05						EQUIPMENT	Acker Deterson	
	MA	K 1		E.A. #		00	79-01-5	5		GROL	INDWATE	R LEVEL	OPERATOR	Feleison	
	in the			GROL	JND EL	EV. 15	642.04 (m)		DATE		n ELEV. m	METHOD	HQ Core	
			4	HAMN	/IER DR	OP SYS	STEM_R	ope - Cathe	ead	3/12/33			BACKFILLED	_Yes	ATE 9/14/1999
	=. =. /	DEDTU	SAN	IPLE E	BLOW CO	JUNT									
	ELEV. (m)	(m)	NO.	TYPE Inc	50 mm rements	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MAT	FERIAL DE	ESCRIPTION		REMARKS
		_													
		-													
		-													
		-													
	1531.04 -	-11													
		_													
		-													
	1530.04 -	-12								12.04					
		-													
		Ľ													
		_													
	1529.04 -	-13													
		-													
		-													
	1528.04 -	-14													
		-													
		-													
		-													
	1527.04 -	15													
	1327.04														
		-													
		-													
		-													
	1526.04 -	-16													
		[
		_													
		-													
	1525.04 -	-17													
		-													
11/01		_													
T 5/1	1524.04 -	- 18													
T.GD		-													
Ö		-													
₹ N		Ľ													
.GP	1523.04 -	- 19													
015E		-													
9700		-													
TOC		-													
N		_													

					_		. o/	12/00			EXPL	ORATIO	N LOG			
					S	TART DATE	<u> </u>	12/33								SHEET 1 OF 1
					El	ND DATE	9/	12/33	Freewoy F	vtono	on Proise	∽t		STATION	99+24 "P"	
					JC	OB DESCRI	PTION	1-000		xtensi	Sh Piojeo	<i>.</i>		OFFSET	2.39 RT	
	100				LC	OCATION			Jounty, Ne	aua				ENGINEER		
	1 Mart	C L	2		B	ORING	0	99+30	_]		Peterson	
	Z.		,		E.	A. #		079-01-	<u>`</u>							
	Ĩ.	~			G	ROUND EL	EV15	548.57 (m)	<u> </u>	9/12/99	NE	ELEV. III	METHOD	HQ Core	
					H	AMMER DR	OP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesDA	TE9/14/1999
	ELEV. (m)	DEP (m	'TH 1)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DI	ESCRIPTION		REMARKS
			0.00	A					w, PI, Sv			Soft, comp brown Me Consisten Sandy Gra	pletely wea tasediment acy of Claye avel.	thered, disturbe t ary Landslide I ey Gravelly Sanc	d, grey Deposits . I to Clayey	
	1547.57 -	-1														
		Ē.	4 50													
		-	1.52			7				-		Grades to	Silty Grave	elly Sand consis	tency.	
		+ .	1 98	В	SPT	17 26	43						,	,	,	
	1546.57 -	-2	1.00			20				1						
			2.44													
		-		C	SPT	17 17	34									
		- :	2.90	Ŭ		17						Altered to	medium to	high plastic Sar	ndy Clay	
	1545.57 -	-3 `	3.05	D					w, PI, Sv	-		with varyir	ng amounts	s of gravel.		
		[
		-														
		- :	3.96													
	1544.57 -	-4		F	SPT	10 14	32									
			4.42	-		18	02			_						
		-														
	4540.57	-														
	1543.57 -	-5														
		- !	5.49													
		-		F	SPT	9 14	27									
	4540.57		5.94	·		13										
	1542.57 -	6										Highly var	riable rangi	na from silty to a	lavev	
		-										fines.				
		-														
	15/1 57	Ĺ, :	7.01								7.01					
	1041.07 -	-		G	SDT	9	27					Soft, com	pletely wea	thered, highly fra	actured	
			7.47	0		15				4		clayey sar	nd consiste	ncy.		
01		-														
5/11/	1540.57 -	- 8														
GDT	1540.57	-														
DOT.		- 8	8.53													
N		-		н	SDT	15	55			1						
(GPJ	1539.57 -	9	8.99			35					8.99					
015D		ļ														
0079		F														
DOT		F														
NV_		_														

						. 10)/11/98			EXPLORATION LOG	
				S		- <u>- 10</u> - 10)/13/98				SHEET 1 OF 7
				E١			10/00 1_520		vtenci	on Project STATION 100+42	" <u>Р"</u>
				JC	DB DESCRI	PTION	ashoo (vada	OFFSET OFFSET SDR	1
	- Sar			LC	DCATION	 			aua	ENGINEER Acker	
	ž.			B	DRING		170 01 1	5			 າ
	1	$\boldsymbol{\sim}$		E.	A. #		56 06 /) (m)		DATE DEPTH m ELEV. m DRILLING	
	h			G	ROUND EL	EV15) 00.00 (ר			10/13/98 NE METHOD HQ Core	10/12/1000
				H	AMMER DR	OP SYS	STEM	kope - Cathe	ead	BACKFILLED Yes	DATE
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		_								Moist, brown Clayey Sand with Gravel . Gravel consists of volcanics and	
		-								metasediments. Easily washed out on drilling.	
		-									
	1555.86 -	_ 1									
	1000.00	-									
		-							SC		
		-									
	1554.86	Ĺ,									
	1004.00	-									
		_ 2.44	A					w, PI, Sv	_	2.50	
		-								Soft to moderately hard, highly weathered,	
	1552.96	3.05	5 _							highly fractured, greenish-gray Metasedimentary Bedrock Filled fractures of	
	1555.00	-	B					w, PI, Sv	-	red-brown to grey-green sandy clay to clay.	
		-								Metasedimentary bedrock easily crumbles to soil.	
		-								Moderate FeOx and manganese staining along	
	1550.00										
	1552.00	-4									
		4.57	,								
			C					w, PI, Sv	-		
	1551.96	-									
	1551.60	-									
		-									
		-									
	1550.90										
	1000.00	- 6.10	₽ D					w, PI, Sv	-		
		-									
		-									
	1540.00	_ _									
	1049.00	– ′									
		L									
01		-									
5/11/(4546.00	-									
3DT (1548.86 -	8								Hydrothermal alteration present in near-vertical	
DOT.G		_								fracture.	
NV_C		-									
- LAE		-								8.99 Few volcanic fragments.	
15D.(1547.86 -	-9								Moderately hard to hard, highly to moderately	1
0620		Ļ								dark grey Metasediment Bedrock . Sandy clay	
OT 0		-								fracture filling.	
۵ ۲		-									
~			1								

						10	/11/08			EXPLORATION LOG	
				ST	FART DATE	10	/11/90			SHEET 2	OF 7
				E١	ND DATE		10/90	 		STATION <u>100+42 "P"</u>	
				JC	DB DESCRI	PTION	1-060		xtensio	OFFSET OFFSET	
	24			LC	DCATION		asnoe (Jounty, Nev	ada	ENGINEER <u>SDB</u>	
	1 Mart			BC	ORING	10	0+50		r		
	Ą			Ε.	A. #	0	079-01-5) \			
	Ž.			GI	ROUND EL	EV15	56.86 (m)		10/13/98 NE HQ Core	
				HA	AMMER DR	OP SYS	STEMR	lope - Cathe	ead	BACKFILLED Yes DATE 10/13	/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION REMARK	ĸs
		_									
		-									
	1545.86 -	-11								10.97	
		-								completely weathered, blue-gray to tan grey	
		-								Metasedimentary Bedrock. Easily crumbles	
										along fractures. Sandy clay filled fractures.	
	1544.86 -	-12								Jumbled mass of both metasediment and basalt	
		-								fragments. Mica in 1cm wide seams	
		-									
		_									
	1543.86 -	-13									
		_									
		-									
		_									
	1542.86 -	- 14									
		-									
		-									
										voicanic fragments extensive.	
	1541.86 -										
		-									
		-									
	1540.86 -	-16								A Face with several sector	
		-								1.5cm wide quartz vein.	
		-									
	1539.86 -	-17									
		-								1.5cm wide quartz vein.	
		Ľ									
1/01		[
T 5/1	1538.86 -	-18									
T.GD.		-									
DO		Ľ									
א ר		[
D.GP	1537.86	- 19									
9015		-								Altered fragments extensive.	
T 007		L									
DO		_									
Ž			<u> </u>								

						10	/11/00			EXPLORATION LOG			
				ST	FART DATE		/11/98						SHEET 3 OF 7
	Ī			E١	ND DATE	_10	/13/98	<u> </u>			STATION	100+42 "P	"
				JC	DB DESCRI	PTION	I-580	Freeway E	xtensic	n Project	OFFSET	11.75 RT	
				LC	OCATION	W	ashoe (County, Nev	/ada		ENGINEER	SDB	
	W22	to p		BC	ORING	_10	0+50				EQUIPMENT	Acker	
	1 K			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	i i			GI		_{EV} 15	56.86 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				о. ц/			TEM R	ope - Cathe	ead	10/13/98 NE		Yes DA	TE 10/13/1998
								•	I		BACKITELED	DF	
	ELEV.	DEPTH	NO.		150 mm	Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(11)	(11)	-		Increments	<u>300 mm</u>	Recovid			Metasediment fragme	ents dominate.		
		-											
		_											
	1535.86 -	-21											
		-											
		-											
		-											
	1534.86 -												
	1334.00												
		_											
		-											
		-											
	1533.86	-23											
		_											
		-											
	1532.86 -	-24											
		-											
		_											
	1531.86 -	-25											
		-											
		-											
		-											
	1530.86 -	-26											
	1000.00												
		-								Hydrothermal alteration fractures	on with slight mi	ica along	
		-											
	1000 5-	- -											
	1529.86 -	-21											
		L											
Ļ		_											
11/0		-											
JT 5/	1528.86 -	-28											
T.GL		-											
/_DC													
N N		Ļ											
D.GP	1527.86 -	-29											
9015		-								Enders Street 1 at	al alterati		
007		-								Extensive hydrotherm	ial alteration.		
DOT		-											
N													

						10	111/00			EXPLORATION LOG			
				ST	TART DATE		//11/98						SHEET 4 OF 7
				E١	ND DATE	10	/13/98				STATION	100+42 "P'	1
				JC	DB DESCRI	PTION	I-580	Freeway E	xtensic	n Project	OFFSET	11.75 RT	
				LC	OCATION	W	ashoe (County, Nev	/ada		ENGINEER	SDB	
	Muz			BC	ORING	10	0+50				EQUIPMENT	Acker	
	MAL			F	A #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	and the					_{EV} 15	56.86 (m)		DATE DEPTH m ELEV. m		HQ Core	
								ope - Cathe	ead	10/13/98 NE		Yes DA	TE 10/13/1998
									I		BACKFILLED	DA	
	ELEV.	DEPTH	NO		150 mm	Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)			Increments	300 mm	Recov'd			5cm volcanic fragmer	nt.		
		-									it.		
		-											
	1525.86	-31								Extensive FeOx stain	ing along fractu	res.	
		-											
		-											
		-											
		-											
	1524.86	- 32											
		_											
		-											
	1523.86	-33											
		-											
		-								22.00			
										Soft to moderately ha	rd. highly fractu	red.	
	1522.86	34								highly weathered, gra	yish-green		
		-								near fractures to siltv	sand soil. Exte	nsive to	
		-								moderate FeOx stain	ing with variable	•	
		-								manganese staining.			
	4504.00	-											
	1521.86												
		_											
		_											
		-											
	1520.86	36											
		-											
		_											
	1519.86	-37											
		-								Extensive hydrotherm	al alteration.		
		F											
/01		-											
5/11	1518.86	_38											
3DT	1010.00	- 30											
JOT.(L											
N C		-											
1 L T		-											
5D.G	1517.86	- 39											
7901.		-											
T 00		Ę											
DO		L											
N													

ĺ						10	/11/00			EXPLORATION LOG			
				ST	ART DATE		/11/90						SHEET 5 OF 7
				E١	ND DATE		13/90	 		n Drain at	STATION	100+42 "P	"
				JC	B DESCRI	PTION	1-000		xtensio		OFFSET	<u>11.75 KI</u>	
	- 10			LC	OCATION			Jounty, Nev	ada		ENGINEER		
	2Mm			BC	ORING	10	0+50		r			Peterson	
	The second			Ε.	A. #		79-01-5) \		GROUNDWATER LEVEL	DRILLING		
	V			GI	ROUND EL	EV. 15	56.86 (m)	<u> </u>	10/13/98 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead		BACKFILLED	Yes DA	TE 10/13/1998
	ELEV.	DEPTH	SAN		BLOW CO 150 mm	DUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd		Cloup				
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	1515.86 -	-41											
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5/11/(1 = 0 0	-											
ĎT	1508.86 -	48											
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D_N													

						10	1/11/02			EXPLORATION LOG			
				ST	FART DATE	<u> </u>	1/12/00						SHEET 6 OF 7
				E١	ND DATE		15/90		vtonali	n Drojaat	STATION	100+42 "P"	
				JC	DB DESCRI	PTION	086-1	Freeway E		n Project	OFFSET	11.75 RT	
				LC	OCATION	V		Jounty, Nev	ada		ENGINEER		
	2Mm			BC	ORING		0+50		i]	EQUIPMENT	Peterson	
	Å			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	<i>ž</i> u			GI	ROUND EL	EV15	56.86 (m)		10/13/98 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM _R	Rope - Cathe	ead		BACKFILLED	Yes DAT	E <u>10/13/1998</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT	Percent		USCS		COIDTION		DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD TESTS	Group		SCRIPTION		REWARKS
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	1505.86 -	-51											
	1000.00	-											
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	1503.86 -	-53											
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		-											
		-											
	1502.86 -	-54											
		-								Shattered zone.			
		-								Hvdrothermal alterati	on along fractur	es with	
		-								clay infilling.	0		
	1501.86 -	-55											
		_											
		-											
	1500.86 -	-56											
		_											
		_											
	1499.86 -	-57								Hydrothermal breccia	, extensive alte	ration for	
										approximately 10cm.			
_		L											
11/01		F											
JT 5/	1498.86 -	-58											
T.GL		-											
/_DC													
NN L		Ļ											
D.GF	1497.86 -	-59											
9015		_								Shattered zone, easil	y crumbles to g	ravel-sized	
r 007		Ľ								iragments.			
DOD													
N													

						10	1/11/08			EXPLO	ORATIO	N LOG			
				ST	ART DATE	10	/12/00								SHEET 7 OF 7
				E١	ID DATE		15/90	 	vtonoio	n Draiae	~4		STATION	100+42 "P"	
				JC	B DESCRI	PTION	1-00U		xtensio	n Projec	<i>.</i>		OFFSET	<u>11./5 KI</u>	
	2m			LC	CATION			Jounty, Nev	aua				ENGINEER		
	2Mm			BC	DRING		0+50	-	r	0001				Peterson	
	and and and and and and and and and and	\geq		E./	A. #		79-01-)					DRILLING		
	20			GF	ROUND EL	EV15	005.000	m)	[10/13/98	NE		METHOD	HQ Core	
			N	HA	AMMER DR	OP SYS	STEM _	tope - Cathe	ead				BACKFILLED	YesDAT	E
	ELEV.	DEPTH	SAI	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		ΜΑΤΙ	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	110.		Increments	<u>300 mm</u>	Recov'd		Cloup						
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	1495.86 -	-61													
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	1 4 9 0 9 6	67													
	1409.00	- 0/													
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01		-													
5/11/	1/199 96 -	- 69													
GDT	1400.00	- 00													
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N		F													
.GPJ	1487 86 -	69													
015D.	00.101	- 03													
6200		-													
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						2/	23/00			EXPLORATION LOG	_
				ST	ART DATE	 	23/00			SHEET 1 OF	1
				EN	ND DATE		L-EDU		vtenci	STATION 101+93 "P"	
				JC	B DESCRI	PTION			vada	OFFSET 4.66 KI	
	an a			LC	CATION	 1 C	1+00		aua	ENGINEER	
	WWW			BC	ORING		70 01	5			
	4			E./	A. #		F1 02 /	(m)		DATE DEPTH m ELEV m DRILLING Trackhag	
	1º			GF	ROUND EL	EV15	51.93 (<u>(m)</u>		3/23/00 NE METHOD Trackhoe	
				HA	AMMER DR	OP SYS	STEM	NA		BACKFILLED Tes DATE 3/23/200	<u> </u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION REMARKS	
		-							CL	Moist, stiff to very stiff, olive brown, Sandy Lean Clay with estimated 60-70% low medium plastic fines, 30-35% fine to coarse sand, 0-5%	
		-								Slightly moist to moist, very dense, olive	
	1550.93 -	- 0.91 - 1							-	brown/green, Silty, Clayey Sand with Gravel with approximately 36% low plastic fines 40%	
		1.22	A	GRAB				MC, SA, PI	SC	fine to coarse sand, 24% fine to coarse gravel	
		-							SIVI	with approximately 10% small cooples.	
		- 1.83								1.83	
	1549 93 -	-2	в	GRAB						Slightly moist, moderately hard, olive	
	10 10.00	- 2.13							-	brown/green, Metasedimentary Bedrock moderately weathered, close to very close	
		-								fractured, with the soil index properties of a	
		-								Toony Graded Graver with Sitty Gray and Sand.	
	1548 93 -	-3									
	10 10100	-									
		-									
		- 3.66		0040					-		
	1547 93 -	3.96	C	GRAB				MC, SA, PI		3.96	
	10 11 100	-									
		-									
		-									
	1546.93 -	– 5									
	10 10100	-									
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		-									
	1545.93 -	– 6									
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	1544.93 -	F ⁷									
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5/11,	1543 03 -	_ 8									
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GPJ	15/2 02	Ĺ.									
)15D.	1042.93	-9									
06700		F									
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						. 10)/7/98			EXPLO	ORATIO	N LOG			0UEET /
				S		: <u>- 10</u> 10	/10/98								SHEET 1 OF 7
				El	ND DATE		1.580	Freeway F	vtenci	on Proiec	et.		STATION	101+94 "P"	
				JC	DB DESCRI	PTION			vodo		,ı		OFFSET	20.00 KT	
	- Arr			LC	DCATION		12100		aua				ENGINEER	Acker	
	× N			B	ORING					CDOU				Peterson	
	The second second second second second second second second second second second second second second second se			E.	.A. #		E1 26 () m)		DATE	DEPTH m	ELEVEL	DRILLING		
	Ve			G	ROUND EL	EV	<u>) 20 וכו</u> ר	III)		10/10/98	NE		METHOD		10/10/1000
				H	AMMER DR	OP SYS		tope - Calin					BACKFILLED	DATE	
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DE	ESCRIPTION		REMARKS
	1550.26	0.00	A					w, PI, Sv			Moist, bro moderatel fractured of staining of	wn to blue- ly to highly gravels anc n cobbles a	gray Sandy Cla weathered and I cobbles. Sligh and gravel.	y , with highly t FeOx	
	1540.26	- - - -							CL						
	1549.20	<u> </u>													
		_								2.44	0 4 1				
	1548.26	- - - <u>3</u> 3.05	В					w, Pl, Sv	-		Soft, brow completely Metasedir from lands	in with dark y weathere mentary Be slide mover	t grey fragments d, highly fracture drock. Highly di ment.	ed, isturbed	
	1547.26	- - 4 -													
	1546.26	- 5 - -													
	1545.26	- 6 -								6.10	Soft, highl	y to comple	etely weathered		
	1544.26	- - - - - -									green-gra disturbed	y Metasedi from landsl	mentary Bedroo	sk. Higniy	
V_DOT.GDT 5/11/01	1543.26	- - - - -													
0079015D.GPJ N	1542.26	- 9 _{9.14} -	c					w, Pl, Sv	-						
NV_DOT		_													

START DATE 10/1908 START DATE 10/1908 PEND DATE 10/1908 START DATE 10/1908 JOD DESCRIFTON L-580 Freeway Extension Project OPFSET START DATE JOD DESCRIFTON L-580 Freeway Extension Project OPFSET START DATE JOD DESCRIFTON Maskee County, Nevada EQUIMENT EQUIMENT BORING 102-00 GROUNDWATER LEVEL OPFRATOR GROUNDELEV. 15512 6(m) OPFRATOR Pate Deptini Maskee Date 10/10/19 HELEV DEPT SOUTH RECOMMENT DEPT DEPTIN DATE 10/10/19 HALSON NO Pate 10/10/19 MATERIAL DESCRIPTION REMARKS 1940.26 -11 DOTH DEPTIN SOUTH RECOMMENT NO Pate 10/10/19 1953.26 -12 DOTH DEPTIN DOTH DEPTIN NO Pate 10/10/19 1953.26 -12 DOTH DEPTIN DOTH DEPTIN NO Pate 10/10/19 1953.26 -16 DOTH DEPTIN DEPTIN DEPTIN DEPTIN 1953.26 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>10</th><th>7/09</th><th></th><th></th><th>EXPLO</th><th>ORATIO</th><th>N LOG</th><th></th><th></th><th></th></td<>							10	7/09			EXPLO	ORATIO	N LOG			
END DATE L0/1036 STATION 001494 P* JOB DETECRIPTION 1580 Freeway Extension Project OFFSET 2000 RT LOCATION Washoe County, Nevada FRAME SBB BORINS 102-90 EA 0079-01-5 GROUNDVATER LEVEL OPERATOR GROUND ELEV. 1551.26 (m) Image: County in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in the county in					ST	ART DATE	10	11/90								SHEET 2 OF 7
USB DESCRIPTION LOCATION Visition Fright OFFSET SUBB BORING 102-00 EXA FORMAGE SUBB Experiments Acter BORING 102-00 EXA 0078-01-5 Experiments BORING Experiments					E١	ND DATE		10/90	 					STATION	<u>101+94 "P"</u>	
LOCATION Washing - Location Province Source Province Source Province Source Province					JC	B DESCRI	PTION	1-000		xtensio	n Projec	л		OFFSET	20.00 RT	
DORING 102400 Construction DORING 102401 EA 0079-01-5 GROUNDWATER LEVEL 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5 0078-01-5		- Ann			LC	OCATION		asnoe (Jounty, Nev	ada				ENGINEER		
E.A.# .00/9/01-5 GROUNDVALEY DETENS Intermediation Detension (Procession) Detension (Procession) Detension (Procession) <thdetension)< th=""> Detensind (Procession) <</thdetension)<>		2Wml			BC	ORING	10	2+00		r					Peterson	
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HAMMER DROP SYSTEM Köpe - Lättead Address BACKFILLED Yes Date 10/10/19 ELEV. DEPTH SAMP FORMULA Value		te			GF	ROUND EL	EV15	51.26 (m)	— t	10/10/98	NE		METHOD	HQ Core	
LEV. DETrit SAME BLOW COUNT Incements Normal Late Precent Description MATERIAL DESCRIPTION REMARKS 154026 -11 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -				N	HA	AMMER DR	OP SYS	STEM	tope - Cathe	ead				BACKFILLED	Yes DA	TE 10/10/1998
(m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) <th></th> <th>ELEV.</th> <th>DEPTH</th> <th>SAN</th> <th></th> <th>BLOW C 150 mm</th> <th>OUNT Last</th> <th>Percent</th> <th>LAB TESTS</th> <th>USCS</th> <th></th> <th>МАТ</th> <th>ERIAL DE</th> <th>SCRIPTION</th> <th></th> <th>REMARKS</th>		ELEV.	DEPTH	SAN		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		МАТ	ERIAL DE	SCRIPTION		REMARKS
1540 26 -11 1550 26 -12 1550 26 -13 1557 26 -14 1556 26 -16 1552 26 -16 1532 26 -17 1532 26 -18		(m)	(m)	NO.	TIFE	Increments	300 mm	Recov'd		Gloup						
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ſ						10	7/09			EXPLO	ORATIO	N LOG			
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				E١	ND DATE		10/98	 					STATION	<u>101+94 "P"</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E		n Projec	7		OFFSET	20.00 RT	
				LC	OCATION		ashoe (County, Nev	ada				ENGINEER	<u>SDB</u>	
	2MM			BC	ORING	10	2+00		r]	EQUIPMENT	Peterson	
	Z.			Ε.	A. #	00	79-01-5	5	 	GROU					
	2c	~		GI	ROUND EL	EV15	51.26 (m)		10/10/98	NE	ELEV.III	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesDA	TE <u>10/10/1998</u>
ľ	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT	Percent	LAB TESTS	USCS		ΜΔΤΙ		SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group						
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		_													
	1527.26 -	-24								23.93	Soft. hiahl	lv weathere	d. highly fractur	ed.	
		-									blue-gray	to green-gr	ay Metasedime	ntary	
		-									along frac	tures.	y to highly reov	UXIUIZEU	
	1526.26 -	-25													
		-													
		-													
	1525.26 -	-26													
		-													
		-													
	1524.26 -	-27													
		-													
		-													
/01															
5/11	1523.26 -	-28													
.GDT		-													
DOT		-													
Z		L													
GP.	1522.26 -	-29													
3015E		-													
3700		-													
DOT		Ľ													
Ž															

						10	/7/08			EXPLORATION LOG			
				ST	FART DATE	10	/1/30						SHEET 4 OF 7
				E١	ND DATE		10/90	 		n Ducie et	STATION	101+94 "P	"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	20.00 RT	
	-1-			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER	<u>SDB</u>	
	2MM			BC	ORING		2+00				EQUIPMENT	Peterson	
	Z.			Ε.	A. #	00	79-01-5)		GROUNDWATER LEVEL	DRILLING		
	Ž.	~		GI	ROUND EL	EV15	51.26 (m)		10/10/98 NE	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	TEM R	ope - Cathe	ead		BACKFILLED	_YesDA	TE 10/10/1998
	ELEV.	DEPTH	SA	MPLE	BLOW CO		Percent		USCS				PEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD ILSIS	Group				REWARKS
		-											
		-											
	1520.26												
		_											
		-											
		-											
	1519.26	- 32								Deels save seeils bred			
	1010.20	- 02								ROCK CORE EASILY DROK	en and crumple	es.	
		-											
		-											
	1510.06												
	1310.20	- 35											
		-											
		-											
	1517.06	- 24											
	1317.20	- 34								Hydrothermal alteration	on moderate.		
		-											
		-											
	1516.06	- 25											
	1510.20	- 35											
		-											
		-											
	4545.00	-											
	1515.26	- 30											
		L											
		-											
	454400	-								Slickensides present	along fracture s	urface	
	1514.26	-31								weak material.	along naciule s	, ounded,	
		L											
1		_											
5/11/(+								Easily crumbles to sil	ty sand soil.		
DT (1513.26	38											
OT.G		_											
NV_D		-								Calcite filling in fractu	re.		
I L d E		-											
15D.C	1512.26	39											
0620		Ļ											
OT 0		-											
V_D		-											
<u> </u>			1										

						10	0/7/09			EXPLORATION LOG			
				ST	FART DATE	E	1/1/90					SHEET 5 OF 7	
				E١	ND DATE		10/96	 		n Ducie et	STATION		
				JC	DB DESCR	IPTION	1-000		xtensic		OFFSET 20.00 RT		
	- Ann			LC	DCATION			Jounty, Nev	ada		ENGINEER <u>SDB</u>		
	2Wml			BC	ORING	10	2+00	-			EQUIPMENT <u>Acker</u>		
	4			Ε.	A. #		79-01-5	<u>`</u>		GROUNDWATER LEVEL	DRILLING US C		
	te			GI	ROUND EL	EV. 15	51.26 (m)		10/10/98 NE	METHOD HQ Core		
			1	HA	AMMER DF	ROP SYS	STEM _R	tope - Cathe	ead		BACKFILLED Yes D	ATE 10/10/1998	
	ELEV.	DEPTH	SAN		BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION	REMARKS	
	(m)	(m)	NO.	TTPE	Increments	300 mm	Recov'd		Group				
		-											
		-											
	1510.26	-41											
		-											
	1509.26	-42											
		-											
		-											
	1508.26	-43											
		-											
		-											
	1507.26	-44								Highly hydrothermally	/ altered.		
		-								Decreasing fracture s	pacing and density.		
		-								rypiouny, light and on			
		Ľ											
	1506.26	-45											
		-											
		-											
	1505.26	-46								Fractures hydrotherm	ally altered, filled veins.		
		-											
		-											
	1504.26	47											
		-											
		-											
/01		-											
5/11,	1503.26	48											
GDT	1000.20												
DOT.		-											
N		-											
.GPJ	1502.26	40											
015D.	1002.20												
0079		-											
DOT		-											
NV_C		_											
						10	/7/09			EXPLORATION LOG			
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				ST	FART DATE	10	40/00						SHEET 6 OF 7
				E١	ND DATE	10	/10/98				STATION	101+94 "P	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Project	OFFSET	20.00 RT	
				LC	OCATION	W	ashoe (County, Nev	vada		ENGINEER	SDB	
	Mr	U.L.		ВС	ORING	10	2+00				EQUIPMENT	Acker	
	Ĩ.			Е.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	Peterson	
	2 c			GI	ROUND EL	_{EV.} 15	51.26 (m)		DATE DEPTH m ELEV. m	DRILLING METHOD	HQ Core	
				н		OP SYS	R	ope - Cathe	ead	10/10/98 NE		Yes DA	TE 10/10/1998
								•	'		BRORITELED	D/	
	ELEV.	DEPTH	NO.	TYPE	150 mm	Last	Percent	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	(11)	(11)			Increments	300 mm	Recova						
		-											
		_											
	1500.26	-51											
		-											
		-											
		-											
	4 400 00	-											
	1499.26	52											
		_											
		-											
		-											
	1498.26	-53											
		-											
		-											
	1497.26	-54											
	1.01.20	-											
		-											
		-											
		-											
	1496.26	- 55											
		_											
		-											
	1495.26	-56											
		F											
		F											
	1494.26	-57											
	-	F											
		F											
01		F											
5/11/	4 400 65	- -											
DT	1493.26	58											
OT.G		L								Hydrothermally altere	ed along fracture	es,	
⊆ ≥		F								spacing.	sea, increased f	racture	
PJ N		-											
SD.GF	1492.26	-59											
9015		F											
007		F											
DOT													
NN		-											

						10	/7/09			EXPL	ORATIO	N LOG			
				ST	FART DATE	10	11.90								SHEET 7 OF 7
				E١	ND DATE	_10	10/98	 		n Draia	-1		STATION	101+94 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E		n Projec	X.		OFFSET	20.00 RT	
		, ,		LC	OCATION		ashoe (County, Nev	ada				ENGINEER		
	2MM	6		BC	ORING	10	2+00		r]	EQUIPMENT	Peterson	
	- Z			Ε.	A. #	00	79-01-5)		GROU					
	n n			GI	ROUND EL	EV15	51.26 (m)		DATE 10/10/98	NE	ELEV. M	METHOD	HQ Core	
			1	HA	AMMER DR	OP SYS	STEM R	lope - Cathe	ead				BACKFILLED	Yes DAT	E <u>10/10/1998</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO		Percent		USCS		МАТ				DEMADKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LABTESTS	Group						REMARKS
		-													
		-													
		_									Easily cru	mbles to so	pil.		
	1490.26 -	-61													
		-													
		-													
	1489.26 -	-62													
		-													
		-													
		_													
	1488.26 -	-63													
		-								63 40					
		Ľ								00.10					
		_													
	1487.26 -	-64													
		-													
		-													
	1486.26 -	-65													
		-													
		-													
	1485.26 -	-66													
		-													
		-													
	1484.26 -	-67													
		-													
		_													
11/01		-													
ОТ 5/	1483.26 -	-68													
DT.GL		Ľ													
_ DC_		ŀ													
NU		-													
5D.GI	1482.26 -	-69													
7901:															
)Т 00		-													
V_DC		-													
z		1		1			1		1	1					

							10	1/7/08			EXPLO	ORATIO	N LOG			
					S	TART DATE	10	////90								SHEET 1 OF 1
					EI	ND DATE		1/90	 					STATION	103+54 "F	23"
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Projec	π.		OFFSET	3.86 R I	
	- Charl				LC	OCATION		ashoe (County, Nev	ada				ENGINEER	<u>SDB</u>	
	JWW -		5		B	ORING	10)3+50		r				EQUIPMENT	Peterson	
	Ä		<1		E.	A. #	00)79-01-{	5		GROU	NDWATER	LEVEL	OPERATOR	1 61613011	
	n de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la				G	ROUND EL	_{EV.} _15	640.11 (m)		DATE 10/7/98	DEPTH m	ELEV. m	METHOD	HQ Core	
			1	1	н	AMMER DR	OP SYS	STEM_F	Rope - Cathe	ead	10/1/00			BACKFILLED	Yes D	ATE 10/7/1998
				SA	MPLE	BLOW CO	DUNT			11000						
	ELEV. (m)		epth (m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MATE	ERIAL DE	ESCRIPTION		REMARKS
		_	0.00	A					w, PI, Sv			Moist, me	dium dense	e, brown Silty Sa	and with	
		-										fines, 40%	6 fine to me	dium sand, 30%	6 fine to	
		-										coarse su	bangular to	angular gravel.	Colluvial	
		-										ucposits.				
	1539.11	+1														
		_														
		-	1.83	в					w, PI, Sv	_						
	1538.11	+2	2													
		-														
	1537.11	+	3							SM						
		-														
		-														
		-														
	1536 11	Ĺ,	I													
	1550.11	_														
		-														
		-														
		-														
	1535.11	+5	5													
		_														
		-														
	1534.11	$+\epsilon$	5								6.10					
		F														
		Ĺ														
	1533.11	+7	,													
		╞														
		F														
/01		F														
5/11.	1532 11	Į,														
3DT	1002.11	-	,													
DOT.(-														
		F														
- L HE		F														
15D.C	1531.11	+9)													
10670																
<u>Э</u> Т 0(F														
/_DC		-														
ź																

	>					. 8/	20/99			EXPL	ORATIO	N LOG			
				ST		<u> </u>	20/00							400 50 "5	SHEET 1 OF 1
				EN	ND DATE	0/.	20/99	Erooway E	vtoncio	n Projo	~ +		STATION	103+58 "H	23"
				JC	B DESCRI	PTION	1-000		xiensio	in Flojed	JL		OFFSET	40.55 L1	
	- An-			LC	CATION				aua				ENGINEER	Komatsu l	=C220
	5 Mr N			BC	DRING		03+50 (I		[0001				Dan	0220
	The second second second second second second second second second second second second second second second se			E./	A. #		79-01-))				ELEVEL	DRILLING	T	
	2c			GF	ROUND EL	EV15	51.62 (<u>m)</u>		8/20/99	NE		METHOD		
				HA	MMER DR	OP SYS	STEM	IA					BACKFILLED	Yes D	ATE 8/19/1999
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		ΜΑΤΙ	ERIAL DE	SCRIPTION		REMARKS
		- 0.30							sc		Dry, medi Sand with	um dense, i Gravel . wi	dark brown Silt y th 30% low to n	y, Clayey on-plastic	
		- 0.61	7A	GRAB				PI, Sv	SM	0.61	fines, 40%	6 fine to coa	arse sand, and	30% fine to	
		0.01								0.01	Coarse su Topsoil.	brounded to	o subangular gr	avei.	
	1550.62 -	1									Dry, medi	um dense,	light brown Clay	/ey Gravel	
	1000102	- 4.07									35% fine t	to coarse sa	and, and 44% fi	ne to	
		- 1.37	70						-		coarse su moderate	brounded g lv weathere	ravel. Contains	s andesite	
		- 1.68	7В	GRAB				PI, 5V	GC		and vesice	ular volcani	c cobbles and b	oulders.	
	15/0.62	-									Contains	large bould		ulameter.	
	1049.02	2													
		-								2.44					
		2.74							011		Moist, me Sand, with	dium dense h 77% hiah	e, brown Fat Cla plasticity fines.	y with 21% fine	
		- 3.05	7C	GRAB				PI, Sv		2.05	to coarse	sand, and 2	2% fine to coars	se gravel.	
	1548.62 -									3.05	Difficult ex	cavation d	ue to large boul	ders	
		_									present.				
		-													
		-													
	1547.62 -	-4													
		-													
		-													
	1546.62 -	-5													
		Ľ													
		_													
		-													
	1545.62 -	-6													
		-													
		_													
	1544.62 -	-7													
		-													
		-													
1/01															
- 5/1	1543.62 -	-8													
.GDT		-													
DOT		-													
N		-													
GPJ	1542.62 -	9													
115D		F													
6200		F													
DOT		F													
N															

							10)/7/08			EXPLORATION LOG			
					ST	ART DATE	10	0/7/00						SHEET 1 OF 1
					E١	ND DATE		1 500		vtonoic	n Drojaat	STATION	105+05 "F	23"
					JC	B DESCRI	PTION	1-580	Freeway E	xtensic	in Project	OFFSET	3.22 RT	
	.sm				LC	OCATION		ashoe	County, Nev	ada		ENGINEER		
	1 mm	e la			BC	DRING	10)5+00		I		EQUIPMENT	Peterson	
	Ĩ,				Ε.	A. #	00)79-01-	5		GROUNDWATER LEVEL		1 01013011	
	2				GI	ROUND ELI	_{EV.} 15	567.84 ((m)		10/7/98 NF	METHOD	HQ Core	
))	1	HA	MMER DR	OP SYS	STEM _F	Rope - Cathe	ead		BACKFILLED	Yes D	ATE 10/7/1998
	ELEV. (m)	DEPT (m)	н	SAN NO.	<u>IPLE</u> TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0	.00	А					w, PI, Sv	SC	Moist, medium dense	e, dark brown Si	ty , tod 25%	
		-								SM	0.46 medium plasticity fine	es, 45% fine to c	coarse	
		-									sand, 20% fine to coa	arse gravel. Gra I metasediment	ivel	
		-									Soft to slightly hard, h	highly fractured	and	
	1566.84										Bedrock. Clay to sar	Metasedimenta ndv clav filled fra	ry actures	
			50								with slight calcite filling	ng.		
		-	.52	В					w, PI, Sv	-				
		F												
	1565.84	- 2												
		-												
		_												
	1564.84	-3									3.05			
		-												
		-												
		-												
	1563.84	Ĺ												
	1303.04	-												
		-												
		-												
		-												
	1562.84	-5												
		_												
		-												
	1561.84	+6												
		-												
		Ĺ												
	1560.84	- 7												
		+												
		-												
/01		F												
5/11,	1550 94	<u>م</u>												
3DT	1009.04	-												
DOT.(F												
		F												
I Ldc		F												
15D.C	1558.84	-9												
17901		Ľ												
<u>Э</u> Т 0(F												
		-												
ź								1						

				-	TA DT D	. 10)/5/98			EXPL	ORATIO	N LOG			
				S		- <u>- 10</u> - 10)/7/98								SHEET 1 OF 2
				E	ND DATE		1-580	Freeway F	xtenei/	n Proie	-t		STATION	106+53 "P	3
				J	OB DESCRI	PTION			vodo		JI		OFFSET		
	, jan			L	OCATION		asilue (Journy, Nev	aud				ENGINEER	Acker	
	2 Mar			В	ORING					0.001				Peterson	
	The second second second second second second second second second second second second second second second se			E	.A. #		79-01-0 50 70 ())				ELEVEL	DRILLING		
	l.			G	ROUND EL	EV15	52.73 (m)		10/7/98	NE		METHOD	HQ Core	
				Н	AMMER DR	OP SYS	STEM	cope - Cathe	ead				BACKFILLED	_YesDA	ATE 10/7/1998
	ELEV. (m)	DEPTH (m)	H NO	MPLE	BLOW Co 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		0.0	00								Moist, der	nse, brown	Clayey Gravelly	Sand	
		-									60-65% fi	ne to coars	e sand, 0-10% g	gravel.	
		-									Minor cob	bles.			
	4554 70	-	A					w, PI, Sv							
	1551.73	1													
		- 16	52												
		-							SC						
		_ 1.8	³³ C					w, PI, Sv							
	1550.73	-2	в					w, PI, Sv							
		2.4	14					w, PI, Sv,							
		- 27	74					Sh			High plast	tic clay zon	e 0.3 meters thi	ck.	
		-		-					1		Thin sand	lense.			
	1549.73	<u>-3</u> 3.0	⁰⁵ F					w, PI, Sv	-						
			E							3.35	<u> </u>				
		- 3.0	51	-					-		soft to mo	shattered,	ird, highly weath light to dark gre	vered,	
		3.8	31						-		Metasedin Formeland	mentary Be	drock.		
	1548.73	-4	G								rew clay		luies.		
		-													
			70												
		- 4.7	2	-					1						
	1547.73	-5	н					w, PI, Sv							
		- 5.3	33						4						
			1												
		5.7	79						4		Lighty fro.	منسمط سننهم	olou infilling one	lateration	
	1546.73	-6											ciay mining and		
		-													
			J												
		_													
	1545.73	-7													
		- 7.3	32						1						
		Ľ													
1/01		[К												
T 5/1	1544.73	-8 8.0	08												
L.GD ⁻		-													
DO		-													
N N		- 8.6	59						1						
D.GP.	1543.73	-9	М								Zones of I	moderate fr	acturing.		
9015		- 9.3	30						1						
200		F													
DOT			N					W, PI, SV							
N		9.9	1						-		Clay fract	ure intilling.			

						10	VE/08			EXPLOR	ATION	N LOG			
				ST	TART DATE	10	1/5/90								SHEET 2 OF 2
				El	ND DATE	_10	1/98			Ducient			STATION	106+53 "F	23"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Project			OFFSET	8.55 RT	
	.tm			LC	OCATION		ashoe (County, Nev	ada				ENGINEER		
	1 mm	6		BC	ORING	10	6+50			[EQUIPMENT	Peterson	
	Ä			E.	A. #	00	79-01-5	5		GROUND	NATER	LEVEL		1 6(613011	
	2			GI	ROUND EL	EV. 15	52.73 (m)		DATE DEI 10/7/98	NF	ELEV. m	METHOD	HQ Core	
			6	HA	AMMER DR	OP SYS	STEM _R	Rope - Cathe	ead				BACKFILLED	Yes D	ATE 10/7/1998
	ELEV.	DEPTH	SAN NO.	MPLE TYPE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		МАТЕ	ERIAL DE	SCRIPTION		REMARKS
	(11)	(11)	0		Increments	<u>300 mm</u>	Recov'd								
									-						
		[Ρ												
		_ 10.82													
	1541.73 -	-11	~												
		-	Q												
		_ 11.43	Р						-						
		⁻ 11.73	ĸ						_						
	1540.73 -	-12													
		_								Bro		odium to bi	ab plantia alay a	000 0 12	
		-	s							me	ters thi	ck.	gri plastic clay s	eani 0.12	
		-	0												
	4500 70	-													
	1539.73 -	- 13 - 13.26								Hia	hlv frad	rtured			
		-	-							i iig	iny nac				
		13.72	Т												
		-								Mo	deratel	y fractured.			
	1538.73 -	- 14													
		Ľ													
		_	0												
		-													
	1537.73 -	15 15.09								15.09					
		-													
		_													
	1536.73 -	-16													
		-													
		F													
		Ľ													
	1535 73 -	-17													
		L ''													
		-													
5		-													
5/11/C		-													
DT 5	1534.73 -	18													
DT.G															
Д Л		Ļ													
ž Z		F													
D.GF	1533.73 -	- 19													
9015		-													
007		F													
DOT															
N		Ĺ.													

						. 10	1/2/98			EXPLORATION LOG	
				S		10	1/2/08			SH	EET 1 OF 2
				Eľ	ND DATE		1-580	Ereeway F	vtonci	ion Project STATION 108+07 "P3"	
				JC	DB DESCRI	PTION			vodo	OFFSET 0.23 RT	
	- Ser	`		LC	DCATION			Journy, Nev	aua	ENGINEER Acker	
	Server and a server and a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a server a se			B	ORING			_			
	The second second second second second second second second second second second second second second second se			E.	A. #		079-01-	, ,			
	J.	~		G	ROUND EL	EV15	54.88 (m)		10/2/98 NE HQ Core	
				H	AMMER DR	OP SYS	STEM	Rope - Cathe	ead	BACKFILLED Yes DATE _	10/2/1998
	ELEV.	DEPTH	SA	MPLE	BLOW CO		Porcont		USCS		
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD TESTS	Group		LIVIARNO
		0.00								Moist, medium dense, brown Clayey Sandy Gravel colluvium.	
		-							GC		
		-	Δ								
	1662 00	-	A					W, PI, 3V		0.91	
	1555.00 -									shattered, grey to dark grey Metasedimentary	
		- 152								Bedrock.	
		-							1		
		-									
	1552.88 -	-2	Б								
		_	в					w, PI, Sv			
		_									
		- 2.87									
	1551.88 -	-3	_								
		-	C								
		- 3.47							-	3.66	
		-	D							Hard, slightly weathered, fractured, dark grey	
	1550.88 -	3.96 							-	Metasedimentary Bedrock.	
		-									
		-								1.5 meters.	
			Е								
	1549.88 -	-5								Fractures at 60 degrees angles.	
		-									
		- 5.49							_		
		-									
	1510 00	-	F								
	1340.00 -	-0								Shattered zone to 10.5 meters.	
		_ 6.43									
		-									
		F _	G								
	1547.88 -	-7 7 25									
									1		
_		- 7.68	н								
11/0		-									
λT 5/	1546.88 -	-8									
T.GD		-	1							Minor clay in fractures and slightly more	
DO		8.63								weathered.	
N N		-]		
D.GP	1545.88 -	-9	J								
90151		_ 9.24							-		
\$ <u>7</u> 00		F	ĸ							Slightly less fractured and weathered	
DOT		- 9.85									
NN		0.00							1		

						10	1/2/02			EXPLORATION LOG			
				ST	ART DATE	10	1/2/90						SHEET 2 OF 2
				El	ND DATE	_10	1/2/98			- During t	STATION	108+07 "F	23"
				JC	B DESCRI	PTION	1-580	Freeway E		on Project	OFFSET	6.23 RT	
	-24	-x.		LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
	1 Mart			BC	ORING	10	8+00		(EQUIPMENT	Peterson	
	T.			E.	A. #		79-01-5) \			DRILLING		
	2u			GI	ROUND EL	EV15	54.88 (m)	<u> </u>	10/2/98 NE	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM _R	tope - Cathe	ead		BACKFILLED	Yes D	ATE 10/2/1998
	ELEV. (m)	DEPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last 300 mm	Percent Recov/d	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_	L				u						
		_ 10.45											
		-											
	1512 00	-	IVI										
	1545.00 -	-							-				
		-								Fractures at 50 to 60	degrees. angle	S.	
		-	Ν										
	1542.88 -	- 12											
	1042.00	12.19								12.19			
		-											
		-											
	1541 88 -	-13											
		-											
		-											
		-											
	1540.88 -	- 14											
		_											
		-											
	1539.88 -	- 15											
		-											
		-											
		_											
	1538.88 -												
		-											
		-											
		_											
	1537.88 -	-17											
		-											
		-											
1/01		_											
5/1	1536.88 -												
LGD1		-											
DO		F											
N N		Ē											
D.GP.	1535.88 -	- 19											
9015		-											
r 007		È											
		Ĺ											
≥́													

				-		- 10)/5/98			EXPLORATION LOG			
				S		=)/5/QR					400 10 "	SHEET 1 OF 1
				E	ND DATE		1_F00		vtencia	n Project	STATION	109+42 "F	'Z"
				J	OB DESCRI	PTION	1-000				OFFSET	13.80 L1	
	dan.			L	OCATION			Jounty, Nev	aua		ENGINEER		
	2Wml			В	ORING	10	9+50					Peterson	
	4			E	.A. #		079-01-	о		GROUNDWATER LEVEL			
	te			G	ROUND EL	EV15	37.36 (m)		10/5/98 NE	METHOD	HQ Core	
				Н	AMMER DR	OP SYS	STEM	Rope - Cathe	ead		BACKFILLED	_YesD	ATE10/5/1998
	ELEV. (m)	DEPTH (m)	H NO	AMPLE D. TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DI	ESCRIPTION		REMARKS
		0.0	00							Moist, dense, brown,	highly variable	Clayey	
		-							GC		um.		
		0.6	61 A B					w, PI, Sv w, PI, Sv		0.61 Moderately hard, mo	deratelv weathe	ered.	
	4500.00	1 10	7							shattered, dark grey	Metasedimenta	iry	
	1536.36	_ 1 1.0							-	Bedrock.			
		15	2										
		-	² D C					w, PI, Sv	-				
		-											
	1535.36	2 2.1	3	_									
			_										
		-	E										
		2.8	10 F						_				
	1534.36	-3 3.0	8	_					-				
		-	G							I hin clay seam.			
		- 20											
	1533.36	-4 3.9	ю н						-				
		- 4.2	27 ''						_				
		- 47	1										
		- 4.7	2						-				
	1532.36	-5 5.1	3 8										
		-	-										
		57	n K							Highly shattered.			
									-				
	1531.36	6 6.1	0							6.10			
		F											
		-											
	1530.36	-7											
		-											
1/01													
F 5/1	1529.36	-8											
-GD		-											
DO		-											
N		L											
.GР,	1528.36	-9											
3015E		-											
3700		-											
DOT		Ľ											
Ž		ſ											

						10)/1/09			EXPLORATION LOG			
				S	TART DATE)/ 1/90)/1/00						SHEET 1 OF 1
				EI	ND DATE		J/1/98			n Davis st	STATION	110+85 "F	2"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Project	OFFSET	10.66 LT	
	Inter			LC	OCATION		ashoe (County, Nev	ada		ENGINEER		
	1 MM			B	ORING	11	1+10		r		EQUIPMENT	Peterson	
	Ä			E.	A. #	0	079-01-8	5		GROUNDWATER LEVEL			
	He .			G	ROUND EL	EV. 15	525.53 (m)		10/1/98 NE	METHOD	HQ Core	
				H.	AMMER DR	OP SYS	STEM_F	Rope - Cathe	ead		BACKFILLED	Yes D	ATE <u>10/1/1998</u>
	ELEV. (m)	DEPTH (m)	I SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.0	0							Slightly hard to mode	rately hard, wea	athered,	
		-								Metasedimentary Be	drock.	uaik giey	
		-											
		-	A					w, PI, Sv					
	1524.53	1											
		15	2										
		-	B					w, PI, Sv	-				
		-											
	1523.53	-2											
		-											
		-											
	1522.53	<u>-3</u> 3.0	5						-	Shattered to 8.5 meter	ers		
			С										
		- 3.6	6										
		-											
	1521.53	-4	D										
		4.5	7						-				
		-											
	1520.53	-5	E										
		5.3	9										
		-	F										
	1519.53	-6											
		6.3	1						-				
		L											
		-											
	1518.53	-7	G										
		Ľ											
		7.6	2										
11/01		-											
)Т 5/	1517.53	-8	н										
T.GD		-											
V_DC		8.5	3							8.53			
۲ ۲		-											
5D.GF	1516.53	-9											
79015		-											
T 00.													
DO.		-											
Ž													

							<u>8</u> /	11/00			EXPLO	RATIO	N LOG			
					ST		<u> </u>	11/00							440.40 "	SHEET 1 OF 1
)		EN			1,00 J_580	Freeway F	vteneir	on Project	ł		STATION	112+13 "H	3
					JC	B DESCRI	PTION					L		OFFSET	SDB	
	- Arr				LC	DCATION		2110E		aua				ENGINEER	JD 2001 C	
	1 And	6	3		BC	DRING		2+13()	иць-5) -		00010				-	
	4				E.,	A. #		079-01-0 00 00 ())			DWATER	ELEVEL	DRILLING	T	
	Ve				GI	ROUND EL	EV15	80.28 (m)		8/11/00	NE		METHOD	Irackhoe	
		· · · /			HA	AMMER DR	OP SYS	STEM	IA					BACKFILLED	_YesD	ATE 8/11/2000
	ELEV. (m)	DEF (n	PTH n)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
		_	0.15								[Dry, medi	um dense, o	dark brown Clay	ey Sand	
		_	0.46	5A	GRAB					30	0.46	46% fine t	to coarse sa	and, and 16% fir	ne to	
		-	0.61							-		coarse gra	avel. Rootr	nass to 0.5m.		
		-	0.91	5B	GRAB				PI, Sv	4		Gravel wit	th Sand wit	h 29% low plast	icity fines,	
	1579.28	1 										34% fine t coarse gra scattered of unit. Di	to coarse sa avel. Unit c caliche veir ifficult exca	and, and 37% fir contains interbed nlets and cobble vation below 3.0	ne to Ided, is to 15%)m.	
	4570.00															
	1576.26	– 2								GC						
		-														
		Ľ														
	1577.28	-3														
		-														
		-	3 66													
		-	5.00	5C	GRAB				PI. Sv	1						
	1576.28	-4	3.96		0.0.0						3.96					
		-														
		-														
	1575.28	+5														
		-														
		Ľ														
		-														
	1574.28	-6														
		-														
		_														
	1573.28	+7														
		-														
		Ľ														
11/01		F														
T 5/1	1572.28	+8														
T.GD		-														
DO		Ľ														
N N		F														
D.GP	1571.28	-9														
9015.		F														
T 007		Ľ														
DO		F														
≥																

					_		. 10)/1/08			EXPLORATION LOG			
					S	TART DATE	- <u>- IC</u> - 1C	//1/00						SHEET 1 OF 1
)		Eľ	ND DATE	_10	1/90		vtc !	n Drojaat	STATION	112+42 "F	2"
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project	OFFSET	7.09 L I	
					LC	OCATION		ashoe (County, Ne	/ada		ENGINEER	Aekor	
	1 Mm				B	ORING	11	2+50]	EQUIPMENT	Peterson	
	Ä	X	3		E.	A. #	00)79-01-{	5		GROUNDWATER LEVEL	OPERATOR	1 6(613011	
	n de				G	ROUND EL	EV15	520.72 (m)		DATE DEPTH m ELEV. m	METHOD	HQ Core	
				1	H	AMMER DR	OP SYS	STEM_F	Rope - Cath	ead		BACKFILLED	_YesD	ATE10/1/1998
		0.57		SAI	MPLE	BLOW CO	JUNT			11000				
	ELEV. (m)	DEF (n	n)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	ESCRIPTION		REMARKS
			0.00								Moist, dense, brown	grey Clayey Gra		
		-									medium plastic fines.	, 30-40% fine to	coarse	
		-									sand, 10-20% gravel			
		+		А					w, PI, Sv					
	1519.72	+1												
		F												
			1.52							-				
		L								60				
	1518.72	<u>_2</u>								30				
		-												
		-												
		-												
		+	2.05											
	1517.72	-3	3.05							-				
		-									3.66			
		-		В							Soft to hard, highly w	eathered, shatte	ered, dark	
	1516.72	-4									grey metasedimenta	гу Веагоск.		
		+												
		+	4.57											
	1515 72	5												
	1010.72	Ļ		С					w, PI, Sv					
		+												
		-	5.58							-				
		-												
	1514.72	-6		D										
		F												
			6.64											
		-								1				
	1513.72	+ 7		Е										
			1.19							-				
		-												
<u>^</u>		F												
5/11,	1510 70	Ĺ												
DT	1512.72	T.		F										
OT.C		-	9 5 2											
□ 2		-	0.03		-					1				
∠ Lq			8.90	G										
5D.G	1511.72	-9	9.14								9.14			
7901		-												
T 00.		Ľ												
		L												
≥														

							10)/1/08			EXPLOR	ATIO	N LOG			
					ST	FART DATE	<u> </u>)/1/90								SHEET 1 OF 1
					E	ND DATE		1 590	Erooway E	vtoncia	n Project			STATION	113+97 "F	2"
					JC	DB DESCRI	PTION	1-500			JITFIOJECI			OFFSET	 	
	h	ik.			LC	DCATION			Journy, Nev	aua				ENGINEER	Acker	
	× v	v • ≪	5		BC	DRING		70 01 4							Peterson	
					E.	A. #		079-01-0) m)		DATE DE	PTHm	ELEVEL	DRILLING		
					GI	ROUND EL	EV1	000.00 (III) Pana Cath		10/1/98	NE		METHOD		10/1/1009
			777		HA	AMMER DF	OP SYS	STEM	tope - Calin	eau				BACKFILLED	D	ATE 10/1/1998
	ELEV. (m)	DE (PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
		-	0.00	A					w, PI, Sv		So	ft, comp tasedir	pletely weat	thered, shattere	d, grey earaded to	
		-									cla	y with g	gravel.		cgraded to	
		F														
	1584 80	Ĺ1														
	100 1.00	-														
		-	1.52	Б												
		-		Б					w, F1, 3v							
	1583 80	1/2														
	1000.00	-														
		-														
		-														
	1582.80	13	3.05						w. Pl. Sv.		3.05					
	1002.00	-		C					Sh							
		+														
		-														
	1581 80	Ĺ														
	1001.00	-														
		-														
		-														
	1580.80	5														
	1000.00	-														
		-														
		-														
	1570.90	Ĺ														
	1379.00	Ţ														
		-														
		-														
	1570 00	7														
	1376.00	Ţ'														
		-														
01		-														
5/11/	1577 90	Ĺ.														
GDT	1577.80	18														
DOT.0		-														
		-														
GPJ	4570.00	† _														
115D.	1576.80	– 9														
0620(F														
OT 0		-														
		F														

					_		3/	27/00			EXPLO	RATIO	N LOG			
					S		= <u> </u>	27/00							444.00	SHEET 1 OF 2
					Eſ	ND DATE		1-580	 Freeway F	vtensio	n Projec	t		STATION	114+82	<u>"РЗ"</u> г
					JC	DB DESCRI	IPTION W	ashoe (vada				OFFSET		
	22				LC	DCATION		1+82	Soundy, No.	lada					CME 85	0
	× A		3		B(ORING		70_01_6	5		GROUN				S. Larso	'n
	174				E.	A. #	16	38 18 (, m)		DATE	DEPTH m	ELEV. m	DRILLING	Auger	
					G		EV	Δ	utomatic		3/27/00	NE		METHOD	Ves	3/27/2000
			/ / /		H	AMMER DF	ROP SYS	STEM						BACKFILLED		DATE
	ELEV. (m)	DEI (r	PTH n)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL D	ESCRIPTION		REMARKS
		-								CL		Moist, ver Lean to F medium t coarse sa	ry stiff to ha Fat Clay with to high plas and, 10% fir	rd, dark brown t n estimated 70-8 tic fines, 10-20% ne gravel.	o brown, 30% 6 fine to	Unit logged from cuttings.
		_									0.91			5		
	1537.18	<u>+1</u>									0.91	Slightly m	noist, very c	lense to hard, br	own,	_
		-										Lean Cla medium p sand, 0-1	y with Sand plastic fines 0% fine to	with estimated , 10-20% fine to coarse gravel.	80% coarse	Unit logged from cuttings to 3.0 meters.
	1536.18	2														
		-								CI						
		-														
		_														
	1535.18	-3	3.05													
		-		4A	мс	10 27	69	100								
		-	3.51			42				_	2.00					
											3.66	Slightly m	noist to moi	st, medium dens	se, orange	-
	1534.18	-4								sc		brown, C l estimated fine to co	layey Sand d 30-40% m arse sand,	with Gravel with edium plastic fir 10-20% fine gra	n nes, 50% vel.	
		-	4.57			9					4.63					_
		-	4.98	4B	MC	11 10	21	89				white to p	beach, Hyd i	o very dense, c	sits	$T_{omp} = 16.6$
	1533.18	-5				10										deg. Cel.
		-														
		-														
	1532.18	-6	6.10			13				-						
		_	0.55	4C	мс	11	20	100								T (7.0
		-	0.00			9				-						deg. Cel.
		-														
	1531.18	-7														
		_														
5		-														
5/11/0		-														
DT	1530.18	-8														
OT.G		_														
		F														
ΓďΒ	4500	+														
15D.(1529.18	-9	9.14			5				4						
0620		F	0 55	4D	мс	9	19	89								
OT 0		-	9.00			10				-						Temp. = 19.1 deg. Cel
		-														

[3/	27/00			EXPLO	ORATIO	N LOG			
				S	TART DATE	<u> </u>	27/00								SHEET 2 OF 2
				El	ND DATE	3/.	27/00		vtonoia	n Droiod	.4		STATION	114+82 "F	23"
				JC	OB DESCR	PTION	1-000		xtensic	n Projec	1		OFFSET	14.58 L I	
	24	×.		LC	OCATION			Jounty, Nev	ada				ENGINEER	CME 850	
	1 Mar			B	ORING		4+82	_]	EQUIPMENT	S. Larson	
	The second second second second second second second second second second second second second second second se			E.	A. #		079-01-5	, ,					DRILLING		
	2u			G	ROUND EL	EV15	38.18 (m)		3/27/00	NE		METHOD	Auger	
				H	AMMER DF	OP SYS	STEM	utomatic					BACKFILLED	YesD	ATE 3/27/2000
ľ	ELEV.	DEPTH	SAI		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DI	ESCRIPTION		REMARKS
	(m)	(m)	NO.		Increments	300 mm	Recov'd		Gloup						
		-													
		_													
		_													
	1527.18 -	-11													
		-													
		_													
	1526.18 -	-12													
		12.19			10				-						
		12 65	4E	MC	26 36	62	100								$T_{omp} = 20.6$
					00				-						Deg. Cel.
	1525.18 -	-13													
		-													
		-													
		_													
	1524.18 -	- 14								14.02					
		-									Moist, ver Metasedii	y dense, pa mentary Be	ale green, edrock moderate	ely to	
		-									highly alte	ered with at	oundant iron oxid	de staining.	
	1523.18 -	- 15													
		_ 15.24			23				-						
		- 15.47	4F	SPT	50/75	50/75	89			15.54					
	1522.18 -	- 16													Hole abandoned
		-													at 15.5 meters - very slow auger
		-													advance.
	1521.18 -	-17													
		-													
		-													
10		F													
5/11	1520 18 -	-18													
GDT		-													
DOT		-													
N		F													
GPJ	1519 18 -	-19													
015D															
0079		+													
БQ		F													
N		[

						2/	22/00			EXPLORATION LOG	
				S	FART DATE	<u> </u>	22/00				SHEET 1 OF 1
				El	ND DATE	3/.	22/00	 	vtonoia	station <u>115+12 "P</u>	3"
				JC	DB DESCRI	PTION	1-000		xtensic	OFFSET 10.02 L1	
	54			LC	OCATION		ashoe (Jounty, Nev	ada	ENGINEER ID 702	
	1 Mart	C A		BO	ORING		5+12				
	Ą			E.	A. #		079-01-5) \		GROUNDWATER LEVEL OPERATOR	
	Ve			G	ROUND EL	EV15	37.04 (m)		3/22/00 NE METHOD Irackhoe	
			1	H	AMMER DR	OP SYS	STEM	IA	I	BACKFILLED Yes DA	TE 3/23/2000
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		-							CL	Very moist to moist, very stiff, dark brown, Lean Clay to Fat Clay with estimated 95% medium to high plastic fines, 5% fine to coarse sand.	
	1536.04	<u>+1</u>									
	1535.04	- - - 								Unit contains light grey to white calcite whorls. 1.52 Moist, very stiff to hard, brown to orange brown, Lean Clay to Fat Clay with Sand with estimated 80% medium to high plastic fines, 15% fine to coarse sand, 5% fine to coarse	
		-							CI	gravel.	
	1534.04	- 									
	1533.04	- 4 	,							3.96 Slightly moist, medium dense, cream white to peach, Hydrothermal Deposits moderately to well laminated with very low density.	
		- 4.88	1A	GRAE					_		Temp. = 10.0 deg. Cel.
	1532.04	-5									
		-								5.33	
	1531.04	6 6 									
	1530.04	- 7 -									
V_DOT.GDT 5/11/01	1529.04	- 									
_DOT 0079015D.GPJ N	1528.04	- 9 - -									
Ν											

							- 3/	22/00			EXPLORATION LOG	
					ST		<u> </u>	22/00				SHEET 1 OF 1
					EN	ID DATE		1-580	 Freeway F	vtonci	n Project STATION <u>115+18 "F</u>	/3
					JC	B DESCR				vodo	OFFSET IRO	
	- Arr				LC	CATION		E 10	Sounty, Nev	aua	ENGINEER ENGINEER	
	A AN	e a	\$		BC	DRING		01+0				
	G.		/		E./	A. #		079-01-	D			
	2				GF	ROUND EL	EV15	37.69 (<u>m)</u>		3/22/00 NE METHOD Irackhoe	
		\	7		HA	MMER DF	ROP SYS		IA		BACKFILLED Yes D	ATE 3/23/2000
	ELEV. (m)	DEP (m)	ТН)	SAN NO.	/IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		-								CL	Moist, brown to dark brown, stiff to hard, Sandy Lean Clay/Fat Clay with estimated 60-70% medium to high plastic fines, 25-30% 0.61 fine to coarse sand, 0-10% fine to coarse	
		- c).91								gravel. Base of unit varies from 0.3 to 0.9	
	1536.69	-1 1	1.07	10A	GRAB				MC, SA, PI.	1	Dry, hard, light grey to pale white,	
		-									Hydrothermal Sinter well laminated, slightly porous.	
		-									1.68	
	1535.69	- 2									Dry, medium dense, pale white to cream, Hydrothermal Deposits moderately laminated, with low specific gravity.	Temp. = 10.0
		-									2.59	deg. Cel.
	1534.69	-3										
		-										
		-										
		_										
	1533.69	-4										
		-										
		-										
		-										
	1532.60	- 5										
	1552.09	- 5										
		-										
		-										
		-										
	1531.69	-6										
		-										
		-										
	1530.69	-7										
		-										
		Ľ										
1/01		-										
L 5/1	1529.69	-8										
GD.		-										
DO		-										
Ž		Ľ										
GPJ	1528 69	_ <u>9</u>										
015D	.020.00	ļ										
6200		-										
Ď		+										
		-										

						3/	22/00			EXPLORATION LOG			
				ST	ART DATE		22/00						SHEET 1 OF 1
				EN	ID DATE		1 5 9 0	 Eroowov E	vtonoic	n Brojact	STATION	115+26 "P	3"
				JC	B DESCRI	PTION	1-000		xtensic		OFFSET	46.18 LI	
	54			LC	CATION		asnoe (Jounty, Nev	ada		ENGINEER		
	1 MM			BC	DRING	11	5+26				EQUIPMENT	 	
	Ĩ,			Ε.	۹. #	00	79-01-5	5		GROUNDWATER LEVEL			
	2			GF	ROUND EL	_{EV.} _15	537.80 (m)		JATE DEPTH m ELEV. m 3/22/00 NF	METHOD	Trackhoe	
			1	HA	MMER DR	OP SYS		IA			BACKFILLED	_YesDA	TE
		DEDTU	SAI	MPLE	BLOW CO	DUNT			11000				
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		_							CL	Moist, stiff to hard, da	rk brown, Lean	Clay with	
		-								0.52 plastic fines, 20% fine	e to coarse sand	d, 10% fine /	
		0.61	114	GRAB						to coarse gravel.	atoly bord polo	brown	
		- 0.70		GIVAD						Hydrothermal Depos	its (Unit only oc	curred in	
	1536.80	+1								the eastern most end	of the test pit.)	brown to	
		-								olive, Metasedimenta	iry Bedrock mo	derately	
										to highly altered, very	close fractured	to	
		_											
	1535.80	<u>_2</u>											
		-											
		-								2.44			
		-											
	1534.80	-3											
		_											
		_											
	1533.80	-4											
		-											
		-											
		-											
	1522.90	5											
	1532.60	-5											
		_											
		_											
		-											
	1531.80	-6											
		-											
		-											
	1530.80	7											
	1000.00	-											
		-											
t.		-											
/11/0		-											
DT 5/	1529.80	-8											
T.GD		F											
DO		†											
NN		Ľ											
GPJ	1528.80	9											
015D.	1020.00												
0790		-											
0 TC		-											
V_D(+											
Z				1			1		1				

				-			27/00			EXPL	ORATIO	N LOG			
				S		= <u>-3//</u> 3//	27/00							445 00	SHEET 1 OF 2
				EI	ND DATE		21/00	 Eroowov E	vtopoi	n Broio	~ +		STATION	115+26	"P2"
				JC	OB DESCR		1-000		xtensi	JII FIOJE	JL		OFFSET	<u>3.61 L1</u>	
2ª	L.,			LC	OCATION			Jounty, Nev	aua				ENGINEER	CME 8	50
S.W.				B	ORING		70.04.5			0.001				S. Lars	on
1	1			E.	.A. #		079-01-0 00 00 ()				ELEVEL FLEV m	DRILLING		
	V			G	ROUND EL	EV15	36.02 (m)		3/27/00	NE		METHOD	Auger	0/07/0000
			N	H	AMMER DF	ROP SYS	STEM	utomatic					BACKFILLED	Yes	DATE
ELEV. (m)	D	EPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
	_										Moist, bro estimated to coarse	wn, hard, L 80% medi sand, 5% f	ean Clay with S um plastic fines, ine to coarse gra	and with , 15% fine avel.	
1535.02	2 — · - - -	I							CL		Higher gra	avel conten	t to 1.8 meters.		
1534.02	2:	2								2.44					
1533.02	2 -	3 3.05			24						Slightly m brown, Le 60-70% lo fine to coa	oist, very s an Clay wi ow to mediu arse sand,	tiff to hard, brow t h Sand with est Im plastic fines, 10% fine to coar	n to light imated 20-30% se gravel.	
	-	3.49	2A	мс	24 43 50/138	50/138	100		CL		Calcite wr	noris.			
1532.02	2	1													
1531.02	2	4.57	2B	мс	30 43 50/100	50/100	100		-	4.66	Dry, very Hydrothe	dense, crea rmal Sinter	am to peach,		 Temp. = 21.2
	-														deg. Cel.
1530.02	2 –	5 6 10													
	-	6.55	2C	мс	18 27 48	75	100		_						Temp. = 19.5
1529.02	2	7													deg. Cel.
	-														
0	-									7.62	Drv. medi	um dense.	cream to peach		
1528.02 1528.02	2	3									Hydrothe gravity. (N a Silty Sat 35% non- 20% fine t	rmal Depose Material has nd with Gra plastic fines to coarse g	sits with low spe the soil index p vel, with approx s, 45% fine to co ravel.)	cific roperties c imately parse sand	f
2 GD:02 1527.02	2 - 9	9 _{9.14}			E										
001 00790	-	9.60	2D	мс	5 7 5	12	100		-						Temp. = 21.3 deg. Cel.
	-														

						2/	27/00			EXPLORATION	N LOG			
				S	TART DATE	<u> </u>	27/00							SHEET 2 OF 2
				EI	ND DATE		27/00	Erooway E	vtoncia	n Project		STATION	115+26 "F	52"
				JC	DB DESCRI	PTION	1-500			JII FIOJECI		OFFSET	3.01 L1	
	- An-			LC	DCATION		asilue (Journy, Nev	aua			ENGINEER	CMF 850	
	W.W.			B	ORING		70 01 4						S. Larson	
	1			E.	A. #	16	36 02 (m)		DATE DEPTH m	ELEV.EL	DRILLING	Auger	
				G	ROUND EL	EV. <u> </u>))))))))))))))) ())))	utomatic		3/27/00 NE		METHOD		3/27/2000
				H	AMMER DR	COP SYS	STEM					BACKFILLED	D	ATE
	ELEV.	DEPTH	NO.	MPLE TYPE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATE	ERIAL DE	ESCRIPTION		REMARKS
	(11)	(11)	-		Increments	300 mm	Recovid							
		-												
	4505.00	-												
	1525.02 -	-11												
		_												
		-												
	1524.02 -	- 12												
	1024.02	12.19			5				-					
		-	2E	мс	6	14	100	MC, SA, PI.						
		_ 12.65			8				-					Temp. = 21.5 deg. Cel.
	1523.02 -	-13												
		-												
		-												
		_												
	1522.02 -	-14												
		-												
		_												
		_												
	1521.02 -	-15												
		_ 15.24			6				-					
		- 15.70	2F	MC	12 12	24	100							Temp. = 23.5
		-												deg. Cel.
	1520.02 -													
		_												
		-												
		-												
	1519.02 -	1/ 												
		_												
01		-												
5/11/	1519.02 -	- 19												
GDT	1010.02	- 18.29												
DOT.		-	20	MC	11	27	100		1					
NN		18.75	20		12	21	100			18.75				Temp. = 24.7
GPJ	1517.02 -	-19												deg. Cel.
3015E		-												
3200		-												
DOT		Ē												
NV														

							3/	23/00			EXPLORATIO	N LOG			
					SI	ART DATE	<u> </u>	23/00							SHEET 1 OF 1
					E١	ND DATE		1 520	 Erooway E	vtoncio	n Project		STATION	115+41 "P	3"
		/			JC	B DESCRI	PTION	1-500					OFFSET		
	- Ing				LC	OCATION		asnoe (Jounty, Ne	/ada			ENGINEER		
	1 May				BC	ORING	11	5+41		ſ			EQUIPMENT	 	
	I I				Ε.	A. #	00	079-01-5)		GROUNDWATER				
	Ť.				GI	ROUND EL	EV15	537.44 (m)		3/23/00 NE	ELEV. M	METHOD	Trackhoe	
			\mathbf{A}	1	HA	AMMER DR	OP SYS	STEM	IA				BACKFILLED	_YesD	ATE 3/23/2000
ŀ	ELEV. (m)	C	EPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group	MAT	ERIAL DE	SCRIPTION		REMARKS
ľ			()			morementa	000 11111	T(CCOV u		CL	0.15 Moist, bro	wn, very st	ff, Lean Clay to	Fat Clay	
											plastic fine	a with estim es. 20% fine	ated 70% medit e to coarse sand	um to high	
		-									to coarse	gravel.			
		-	0.91								Bry, nard, Hydrothe	, pale white rmal Sinter	dense, porous,	en, well	
	1536.44	+	1	15A	GRAB				Chemical		laminated	l.			
		-	1.22								1.22				
		Ļ													
	1535.44	+:	2												
		+													
		F													
	1534.44	+:	3												
		+	-												
		-													
		F													
	4500 44	F													
	1533.44	Ľ	4												
		Ļ													
		+													
		+													
	1532.44	+	5												
		-													
	1531.44	+	6												
		F													
		F													
	1530.44	+.	7												
		╞													
		╞													
6		F													
5/11,	1520 44	Ŀ													
3DT	1029.44	Ţ	J												
DT.C		F													
_ ≥		╞													
I Lďč		╞													
5D.G	1528.44	+	9												
17901		Ĺ													
NT 00		F													
/_DC		╞													
ź				1				L			1				

				-		. 10)/1/98			EXPLO	ORATIO	N LOG			
				S		: <u>- 10</u> 10)/1/98							14 5 .45 "	SHEET 1 OF 2
				El			J_580	Freeway F	xtensi	n Proier	rt		STATION	115+45 " 5 30 PT	P2"
				JC	DB DESCRI	PTION					<i></i>		OFFSET	MG	
	22			LC	DCATION		5+50		aua					Acker	
	W.W.W			BO	ORING		70 01 4							Peterson	
	1 miles			E.	A. #		25 00 () m)		DATE		ELEVEL FLEV.m	DRILLING		
	be			G	ROUND EL	EV	535.06 (III)		10/1/98	NE		METHOD		4.0/4/4.000
				H	AMMER DR	OP SYS	STEM	tope - Cathe	ead				BACKFILLED	<u>res</u> [DATE
	ELEV.	DEPTH	SA		BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		MATI	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m) 0.00)		Increments	<u>300 mm</u>	Recov'd		Group		Moist, ver	y stiff to ha	rd, brown Sand	y Gravelly	
		-									Clay with	estimated 5	50-70% medium	to high	
		_									0-10% gra	es, 40-50% avel.	line to coarse s	sano,	
		-	Α					w, PI, Sv							
	1534.08 -	-1													
		-													
		1.52	2						-						
		Ļ													
	1533.08 -	-2							CL						
		-	В					w. PL Sv	СН						
		-						,,							
		_													
	1532.08 -		5												
		-													
		-													
		-													
	1531.08 -	4	C					w, PI, Sv							
	1001.00	-								4.11	Dry, soft t	o slightly ha	ard, cream to pe	each,	_
		4.57	,								laminated	, porous Hy	drothermal Sin	ter.	
		-													
	1530.08 -	- 5													
	1550.00	-													
		-	D					w, PI, Sv							
		-													
	1500.00	-													
	1929.08 -	-0 6.10	,						1						
		_													
		-						_							
	4500.00	-	Е					w, PI, Sv, Sh							
	1528.08 -	-1								7.00	Soft and c	clayey at 7	meters.		
		_								1.32	White, ver	ry soft to sli	ghtly stiff, leach	ed	-
1		_ 7.62	2						-		Hydrother material w	rmal Depos	its. Contains cl	ayey ′	
5/11/(-									material W		specific gravity		
DT (1527.08 -	8													
OT.G		_	F					w, PI, Sv							
		-									Zones of s	soft Silty Cl	ay with 90-100%	6 fines.	
A Ld		-										, 2.	,,		
5D.G	1526.08 -	9 9.14	1												
7901															
T 00		-													
/_DO		_													
ź			G												

						10	1/1/08			EXPLORATION LOG		
				S	TART DATE	10	// 1/90					SHEET 2 OF 2
				El	ND DATE		1/90			n Drainat	STATION	5 "P2"
				JC	DB DESCR	PTION	1-560		xtensic		OFFSET 5.30 F	(1
	an.			LC	DCATION			County, Nev	ada		ENGINEER Acker	
	2 Mart			B	ORING		5+50	-	[EQUIPMENT Acker	son
	G.			E.	A. #		079-01-	5			DRILLING	
	1			G	ROUND EL	EV. 15	35.08 (<u>m)</u>	[10/1/98 NE	METHOD HQ CO	ore to (1/1/2020
				H	AMMER DF	OP SYS	STEM	kope - Cathe	ead		BACKFILLED Yes	DATE10/1/1998_
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	REMARKS
		- 10.67								Red bands of colorati	on.	
		-										
	1524.08	+11										
		_										
		-										
	1523.08	+12 12.19										
		-								Possible Mercury and	Arsenic deposits.	
		-	Ι.									
	1522.08	-13	1					W, PI, SV				
		13.72	2									
		-										
	1521.08	-14								Very soft zones.		
		_										
		-	J									
	4500.00	-										
	1520.08	15.24								15.24		
		-										
		-										
	1510.09	- 16										
	1519.06											
		-										
		-										
	1518.08	-17										
	1010.00	- "										
		-										
/01		-										
5/11	1517 08	-18										
.GDT		-										
DOT		-										
N		F										
GPJ	1516.08	- 19										
015D		-										
0079		F										
DOT		F										
NV												

[2/	22/00			EXPLORATIO	ON LOG			
				S	TART DATE	<u> </u>	22/00							SHEET 1 OF 1
				E	ND DATE	3/	22/00	 	vtonoio	n Draigat		STATION	5+54 "P	2"
				J	OB DESCRI	PTION	00C-I		xiensic	n Project		OFFSET	4 L I	
	alar.			L	OCATION		asnoe (Jounty, Nev	/ada			ENGINEER	702	
	2Mm	2		В	ORING		15+54		[EQUIPMENT	19 <u>2</u> 1	
	Z.			E	.A. #	0	079-01-5	5		GROUNDWATE		DRILLING		
	Ze			G	ROUND EL	EV15	535.35 (m)		3/22/00 NE	m ELEV. m	METHODTra	ackhoe	
				Н	AMMER DR	OP SYS	STEM	IA				BACKFILLED Yes	s D/	ATE
ŀ	ELEV. (m)	DEPTH (m)	I SA NO	MPLE	BLOW C 150 mm	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MA	TERIAL DI	ESCRIPTION		REMARKS
		_							СН	Moist, v with Sa fines, 1	ery stiff to ha nd with estim 5-20% fine to	rd, dark brown, Fat C ated 80% high plastic coarse sand, trace fi	lay c ne to	
		-								coarse	gravel.			
		-								0.85	- Park the second	the sector line has seen a		
	1534.35	+1								Clay to	Fat Clay with	estimated 75-85%	_ean	
		-								medium	to high plas	tic fines, 5-10% fine to		
										Calcite	whorls at 0.9	to 1.8 meters.	ı.	
		-												
	1533.35	-2												
		-	1											
		2.4	4 9 12/	GRA	В				CL					
	1532.35	-3												
		-												
		-												
		-												
	1531 35	_ 4								3.96	.P	la de la - la		
	1001.00	- 4.2	7							Bry, me	aium dense, Iermal Depos	pale white to cream, sits slightly laminated.	, low	
		4.4	2 128	3 GRAI	В			Chemical	-	specific	gravity.			Temp. = 10.0
		-								4.57				deg. Cel.
	1520.25	-												
	1530.35	_ 5												
		_												
		-												
		-												
	1529.35	-6												
		-												
		-												
	1528.35	-7												
		-												
1/01														
5/1	1527.35	-8												
GD.		-												
DO		-												
Ž		Ľ												
GPJ	1526 35	_ <u>9</u>												
015D	.020.00	Ļ												
6200		-												
Ď		+												
		-												

					_		3/	27/00			EXPLO	ORATIO	N LOG			
					S	TART DATE	<u> </u>	27/00								SHEET 1 OF 2
					E	ND DATE		1 590	Erooway E	vtonci	n Proioc	.+		STATION	115+56	"P3"
					JC	DB DESCRI	PTION	1-500			ITFIOJEC	,1		OFFSET	13.40 L1	
	- Sm				LC	DCATION			Journey, Nev	aua				ENGINEER	CME 85	า
	5 Mr M	L'			B	ORING		00+00	-		00011				S. Larso	n
	The second second second second second second second second second second second second second second second se	\sum			E.	A. #		079-01-5)					DRILLING		
	1	/			G	ROUND EL	EV15	36.49 (m)		3/27/00	NE		METHOD	Auger	0/07/0000
					H	AMMER DR	OP SYS	STEM	lutomatic					BACKFILLED	Yes	DATE
	ELEV. (m)	D	EPTH (m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		_										Moist, har estimated	rd, brown, S I 60% medii	andy Lean Cla um plastic fines	y with . 30% fine	
		-										to coarse	sand, 10%	fine to coarse g	gravel.	
		-														
	1535.49	1														
	1000110	-								CL						
		-														
		-														
	1534 49		,													
	1001.10	-									2.29					
		-										Dry, loose	e to dense,	bale white to pe	each,	
		-										gravity. (N	Aterial has	the soil index p	oroperties of	
	1533.49	Ĺ	3.05									a Silty Sa 15% non-	nd with Gra	vel, with approx	kimately parse sand.	
	1000.40	-		1 ^	MC	6	11	100		1		5% fine to	coarse gra	ivel.)	callee calla,	Tama 40.0
		-	3.51	IA		5		100								deg. Cel.
		-														
	1532 49		L													
	1002110	-														
		-	4.57													
		-	-	40		4	0	100		-						
	1531 49		5.03	18		4 5	9	100								Temp. = 16.0
		-														deg. Cel.
		-														
		-														
	1530.49	6	6 10													
	1000.10	-	0.10			4				-						
		-	6.55	1C	MC	6 5	11	100								T (7.0
		-														lemp. = 17.8 deg. Cel.
	1529 49															
	1020.10	- '														
		-														
/01		-														
5/11.	1528 49	Ļ.	1													
GDT	1020.40	-														
DOT.		-														
R		-														
GPJ	1527 49															
015D		-	9.14			12				+		Dense				
6200		L	0 60	1D	MC	19	50	100	MC, SA, PI							
TOC			9.00	-		31				1						Temp. = 21.1
		-														deg. Cel.

						3/	27/00			EXPLORATION LOG		
				S	TART DATE	<u>-</u> <u>-</u> 3//	27/00					SHEET 2 OF 2
				E	ND DATE	3/.	1 5 9 0	 Eroowov E	vtonoir	n Drojaat	STATION	<u>"P3"</u>
				JC	OB DESCRI	PTION	1-500				OFFSET <u>13.40 L</u>	1
	Sm			LO	OCATION			Journy, Nev	aua		ENGINEERCME 85	
	A AN			B	ORING		00+00				ODERATOR S. Larso	on
	4			E	.A. #		00.40))		DATE DEPTH m ELEV m	DRILLING	
	V			G	ROUND EL	EV15	36.49 (<u>m)</u>		3/27/00 NE	METHOD Auger	2/07/0000
				H	AMMER DR	ROP SYS	STEM	automatic			BACKFILLED Yes	DATE
	ELEV.	DEPTH	SAI NO.		BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION	REMARKS
	(11)	-			Increments	<u>300 mm</u>	Recova					
	1525.49	- 								Medium dense		
	1524.49	- - - - - - - - - - - - - - - - - - -										
		- 12.65	1E	мс	8 11 17	28	100	Chemical	-			Temp. = 21.4 deg. Cel.
	1523.49	- 										
	1522.49	- - 14 -										
	1521.49	- - 15 15.24			11				_			
		- - 15.70 -	1F	мс	17 35	52	100		-			Temp. = 23.0 deg. Cel.
	1520.49									16.46		
	1519.49	- - - - - -								Slightly moist, very de Metasedimentary Be strongly altered.	ense, pale green, drock moderately to	
T.GDT 5/11/01	1518.49	- 			12				_			
NV_DO		- - 18.75	1G	MC	25 36	61	100			18.75		Temp. = 24.2
0079015D.GPJ	1517.49	- - -										deg. Cel.
NV_DOT (_										

							3/	23/00			EXPLORATION LOG			
					S	TART DATE	3/	23/00						SHEET 1 OF 1
					E	ND DATE		23/00	 Eroowov E	vtonoic	n Drojaat	STATION	115+60 "H	⁵ 2"
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	in Project (OFFSET	39.95 RT	
	.5~				LC	OCATION		asnoe (County, Nev	ada	Ε	ENGINEER		
	1 MM	e la			B	ORING	11	5+60		r	E	EQUIPMENT	<u>JD 792</u> Tim	
	Ä				E.	A. #	00	079-01-8	5		GROUNDWATER LEVEL		1 11 11	
	n de				G	ROUND EL	EV15	534.64 (m)		DATE DEPTH m ELEV. m N	METHOD	Trackhoe	
			N		H	AMMER DR	OP SYS	STEM	IA		E E	BACKFILLED	Yes D	ATE 3/23/2000
ľ	ELEV. (m)	DEPT (m)	ГН	SAN NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recov/d	LAB TESTS	USCS Group	MATERIAL DES	SCRIPTION		REMARKS
	4500.04	-								СН	Very moist, very stiff to brown, Fat Clay with es 0.46 plastic fines, 10% fine to Moist, very stiff to hard, Sand and Gravel with e medium plastic fines, 20	hard, dark bro stimated 90% h to coarse sand , brown, Lean estimated 60-7 0% fine to coa	own to high I. Clay with 70% arse sand,	
	1533.64	+-1 -								CL	10-20% fine gravel.			
		- <u>1</u> .	.52	10.4					MC CA DI		1.52 Moist. hard. brown. Lea	an Clav with G	ravel with	
		1	.83	13A	GRAE				IVIC, SA, PI	-	estimated 70% medium	n plastic fines,	10% fine	
	1532.64	-2										le lo coarse gi	avei.	
										CL				
		-												
		-									2.05			
	1531.64	-3									Slightly moist, hard/very	y dense, brow	n, Sandy	
	1530.64	- - - 4								CL	Lean Clay with Gravel/ Gravel with estimated 4 40% fine to coarse sand	Clayey Sand v 40% low plasti d, 20% fine gr	with c fines, avel.	
		4	.42	13B	CPAE	2			Chemical	_	4.57			
	1529.64	- - 5 -	.57	138	GRAE	3			Chemical		No Hydrothermal Depos	sits Encounter	ed.	
	1528.64	- 6 -												
-	1527.64	- 7 - -												
NV_DOT.GDT 5/11/0	1526.64	- 												
VV_DOT 0079015D.GPJ 1	1525.64	- - - - -												

				-		. <i>ว/</i>	22/00			EXPLO	ORATIO	N LOG			
				ST		: <u> </u>	22/00								SHEET 1 OF 1
				E			1-200		vtenci	n Projec	` †		STATION	115+65 "P	<u>5</u> "
				JC	DB DESCRI	PTION			/ada				OFFSET	.IRO	
	24			LC	DCATION		5165		aua					JD 792	
	N. N.			BC	ORING		70 01 4							Tim	
	1 m			E.	A. #		019-01-0) m)		DATE		ELEVEL FLEV.m	DRILLING	Trackhaa	
	h			GI	ROUND EL	EV13	000.07 ((11) 1 A		3/22/00	NE		METHOD		2/22/2000
			N	HA	AMMER DR	OP SYS		IA					BACKFILLED	Yes DA	TE
	ELEV.	DEPTH	SAN		BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		MATI	ERIAL DE	SCRIPTION		REMARKS
	(11)	(11)			Increments	<u>300 mm</u>	Recov'd		CL		Moist, stiff	f to hard, da	ark brown, Lean	Clay to	
		_								0.30	medium to	o high plast	ic fines, 20% fir	u% ne to ∏	
		-									medium s	and, 10% f	ne gravel.	rd olivo	
		-									brown, Me	etasedimen	tary Bedrock u	naltered to	
	1534.37	<u>+</u> 1									slightly alt	ered, close	to very close fr	actured.	
		_													
		-													
		-													
	1533.37	-2													
		-													
		-													
		-													
	1532.37	_3													
		_													
		-													
		-													
	1531.37	4													
		-													
		-									Minor oxic	de staining.			
	1500.07	-								4.88					
	1530.37	5											· - ·		
		-									No Hydroi	inermal De	oosits Encounte	red.	
		-													
	1520 27	É.													
	1929.37	-													
		-													
		-													
	1528 27	_ 7													
	1020.07	-													
		-													
/01		-													
5/11.	1527.37	– 8													
GDT		ļ													
DOT.		-													
NV		-													
GPJ	1526.37														
015D.	1020.01														
0079		F													
TOC		F													
NV_L		_													

						2/	22/00			EXPLORATION LOG	
				ST	FART DATE	<u> </u>	22/00			SHEET 1 OF	1
				E١	ND DATE	3/.	22/00	 		STATION	_
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Project OFFSET 40.40 LT	
	Internet			LC	OCATION		ashoe (County, Nev	ada	ENGINEER JRO	-
	1 Mm	C L		BC	ORING	11	5+68			EQUIPMENT JD 792	_
	TA.			E.	A. #	00	079-01-5	5			-
	n de			GI	ROUND ELI	_{EV.} _15	535.90 (m)		DATE DEPTH m ELEV. m DRILLING Trackhoe	
			1	HA	AMMER DR	OP SYS	STEMN	IA		BACKFILLED Yes DATE 3/23/2000)
		DEDTU	SAI	MPLE	BLOW CO	JUNT	_		11000	· · · · · · · · · · · · · · · · · · ·	
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	B MATERIAL DESCRIPTION REMARKS	
	1534.90	- - - - - - - -							CL	Moist, stiff to hard, dark brown, Lean Clay to Fat Clay with Sand with estimated 60-80% 0.46 medium to high plastic fines, 20-25% fine to coarse sand, 10-20% fine to coarse gravel. Moist, moderately hard to hard, pale olive green and brown, Metasedimentary Bedrock unaltered to slightly altered, very close fractured with minor oxide staining throughout.	
	4500.00	-									
	1533.90	-2									
		-									
	1532.90	-3									
	1002.00	Ļ								3.20	
		-									
		-								No Hydrothermal Deposits Encountered.	
		-									
	1531.90	-4									
		_									
		_									
	1530.90	-5									
		-									
		-									
		-									
	1529.90	– 6									
	1020.00	Ľ									
		-									
		-									
		-									
	1528.90	<u>†</u> 7									
		Ĺ									
		L									
11/01		F									
T 5/	1527.90	-8									
T.GD		F									
DO		F									
N		t									
GPJ	1526 00	Ĺ									
115D.	1020.90	3									
0620		F									
DT 0		-									
V_DC		-									
ź		1	1				1				

							2/	27/00			EXPL	ORATIO	N LOG			
					S	TART DATE	<u> </u>	27/00								SHEET 1 OF 2
					EI	ND DATE	3/.	L E 00		vtona	n Droice	~ t		STATION	115+71	<u>"P2"</u>
		/			JC	OB DESCRI	PTION	1-00U		xtensio	on Projec	<i>.</i>		OFFSET	<u>34.98 R</u>	<u> </u>
	-10-				LC	OCATION			Jounty, Nev	/ada				ENGINEER		
	1 Wat	Ž			B	ORING		5+/1						EQUIPMENT	S Larso	on
	- A				E.	A. #	00	079-01-5)		GROU				0. Laio	
	- Ze	~			G	ROUND EL	EV15	534.02 (m)		3/27/00	NE	ELEV. M	METHOD	Auger	
			1	1	H.	AMMER DR	ROP SYS	STEM A	utomatic					BACKFILLED	Yes	DATE
	ELEV. (m)	D	EPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last 300 mm	Percent Recov/d	LAB TESTS	USCS Group		MATI	ERIAL DE	SCRIPTION		REMARKS
	1533.02	-	I									Moist to s brown, Le 80% medi coarse sa Higher gra	lightly mois an Clay wit ium plastic nd, trace fir avel content	t, very stiff to ha h Sand with est fines, 15-20% fi ne gravel. t to 1.2 meters.	ird, imated ne to	
	1532.02	- - - - -	2							CL		Thin grave	el lense (<0	.2 meters thick)		
	1531.02	- - :	3 3.05 3.45	3A	мс	15 43 50/100	50/100	100		-		Thin grave	el lense (<0	.2 meters thick)		
	1530.02	- - - -	1	,							3.66	Slightly m Sand and plastic fine to coarse	oist, hard, b Gravel with es, 15% fine gravel.	prown, Lean Cla estimated 70% to coarse sand	y with 6 medium d, 15% fine	_
	1529.02		5.00	3B	мс	19 38 50/125	50/125	100		CL		Thin grave	el lense (<0	.2 meters thick)		
	1528.02	- - (6.10	30	MC	11	23	100			6.13	Dry, medi	um dense,	cream white to p	peach,	_
	1527.02	- - - -	6.55	5		11				_		gravity. (N a Silty Sai 40% non- 25% fine t	Material has nd with Gra plastic fines to coarse gi	the soil index p vel, with approx s, 35% fine to co avel.)	roperties o imately parse sand,	f Temp. = 17.1 deg. Cel.
V_DOT.GDT 5/11/01	1526.02	- - - -	3													
115D.GPJ N	1525.02		9 9.14	4		A				-						
DOT 00790		_	9.60	3D	мс	7 7 7	14	100								Temp. = 18.3 deg. Cel.
2 Z																

						2/	27/00			EXPL	ORATIO	N LOG			
				S	TART DATE	<u> </u>	27/00								SHEET 2 OF 2
				EI	ND DATE	3/.	27/00		vtonoio	n Droio	- 4		STATION	115+71 "	P2"
				JC	DB DESCRI	PTION	1-000		xtensic	n Projec	<i>.</i>		OFFSET	<u>34.98 RT</u>	
	2m			LC	DCATION			Jounty, Nev	aua				ENGINEER	CME 850	
	2 Mrs			B	ORING		5+71	-	[S. Larson	
	4			E.	A. #		019-01-0) 					DRILLING	A	
	24			G	ROUND EL	EV15	34.02 (m) :	[3/27/00	NE		METHOD	Auger	
		N	N	H	AMMER DR	OP SYS	STEM	utomatic	[BACKFILLED		DATE 3/27/2000
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		-													
		-													
	1523.02	-11													
		-													
		-													
	1522.02	-12													
		12.19)		4				-						
		-	3E	MC	5	11	100								T (0.0
		_ 12.03)		0				-						deg. Cel.
	1521.02	-13													
		-													
		-													
	1520.02	-14													
		-													
		-													
	1519.02	-15													
		_ 15.24	-		6				-						
		-	3F	мс	7	14	100	MC, SA, PI.							
		- 15.70)		7				-						Temp. = 21.6 deg. Cel
	1518.02	-16													uog. ooi.
		-													
		-													
	1517.02	-17													
		-													
		-													
/01															
. 5/11	1516.02	18													
.GDT		- 18.29)												
DOT		-	3G	мс	7 8	19	100	Chemical							
N		18.75			11					18.75					Temp. = 23.1
O.GP.	1515.02	<u>+</u> 19													aeg. Cei.
<u> 9015[</u>		F													
200		F													
DOT															
N															

	>						<u>م</u>	<u>, , , ,</u> , , , , , , , ,			EXPLO	ORATIO	N LOG			
					S	TART DATE	: <u> </u>	22/00 22/00								SHEET 1 OF 1
					E١	ND DATE	3/.	22/00		vtonal	n Droic -	.+		STATION	115+74 "F	2"
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Projec	T.		OFFSET	<u>5.742 RT</u>	
	. Day				LC	OCATION		ashoe	County, Nev	ada				ENGINEER		
	- Mar		•		B	ORING	11	5+72			[EQUIPMENT		
	1 A		1		E.	A. #	00	79-01-	5		GROU		LEVEL	OPERATOR		
	n an	1			G	ROUND EL	_{EV.} _15	34.06 (m)		DATE 3/22/00		ELEV. m	METHOD	Trackhoe	
					H	AMMER DR	OP SYS		IA		5/22/00			BACKFILLED	_YesD	ATE 3/23/2000
			TU	SAN	MPLE	BLOW C	JUNT	_		11000						
	ELEV. (m)	(m	іп 1)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MATE	ERIAL DI	ESCRIPTION		REMARKS
		F.	0.30									Moist, ver	y stiff to ha	rd, dark brown,	Fat Clay	
		- (0.46	4A	GRAE	8						fine to coa	arse sand,	0-10% fine grav	el.	
		+														
		F								СН						
	1533.06	+1	1.22													
			1.37	4B	GRAE	8						Light grey	to white ca	alcite whorls at 1	1.2 to 1.8	
		-										meters.				
		-									1.83					
	1532.06	-2										Slightly m	oist, hard/v with Grav	ery dense, brow	vn, Sandy with	
		F								CL		Gravel wit	th estimate	d 40% low to m	edium	
		+ ;	2.59								2 59	plastic fine	es, 40% fin gravel	e to coarse san	d, 20% fine	
			2.74	4C	GRAE	8					2.00	Dry, medi	um dense,	cream white to	peach,	Temp. = 10.0
	1531.06	L_2										Hydrother laminated	mal Depos	sits moderately t lensity	to well	deg. Cel.
	1551.00											anniacou	, very low c	ionoity.		
		-														
		+									3.66					Temp. = 11.5
		-														deg. Cel.
	1530.06	-4														
		-														
		Ε														
		L														
	1529.06	-5														
		+														
		F														
		-														
	4500.00															
	1528.06	6														
		L														
		F														
		+														
	1527.06	-7														
		F														
		-														
/01		-														
5/11	1526.06	8														
GDT	1020.00	Ļ														
DOT.(\vdash														
N_L		F														
1 L T		-														
5D.G	1525.06	-9														
7901		F														
T 00.		[
DO		F														
N																

						3/	22/00			EXPLORATION LOG			
				S	FART DATE	<u> </u>	22/00						SHEET 1 OF 1
				El	ND DATE		22/00	 	vtonoio	n Draigat	STATION	<u>115+59 "F</u>	'3"
				JC	DB DESCRI	PTION	000-1		xtensio		OFFSET	26.95 L1	
	24			LC	OCATION		asnoe (Jounty, Nev	ada		ENGINEER		
	2 Mr			B	ORING	11	5+74		[EQUIPMENT	 	
	Ą			E.	A. #	00	079-01-5)		GROUNDWATER LEVEL			
	Ž			G	ROUND EL	EV15	536.81 (m)		3/22/00 NE	METHOD	Trackhoe	
			1	H	AMMER DR	OP SYS	STEM	IA			BACKFILLED	_YesD	ATE 3/23/2000
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_							CL	Moist, stiff to very stiff	f, dark brown, L	ean Clay	
		_								high plastic fines, 15%	% fine to coarse	sand, 5%	
		_								0.61 fine gravel.	Hydrothermal	Sinter	
		_								dense, well laminated	l, porous.	Sinter	
	1535.81	-1								Excavator could not d	lig below 0.6 me	eters.	
		_											
		_											
	1534.81	<u>-2</u>											
		_											
		_											
		_											
	1533.81	-3											
		-											
		_											
	1532.81	-4											
		_											
		-											
		-											
	1531 81	5											
	1001.01												
		_											
		-											
		-											
	1530.81	-6											
		_											
		-											
		-											
	1529.81	+7											
		-											
11/01		-											
Л 5/	1528.81	-8											
T.GD		-											
DO													
^N ∩		_											
D.GP.	1527.81	-9											
90151		-											
\$200		-											
DOT		-											
N													

						2/	22/00			EXPLORATION LOG			
				ST	FART DATE	<u> </u>	22/00						SHEET 1 OF 1
				El	ND DATE	3/.	22/00			n Dusis st	STATION	115+88 "F	23"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Project	OFFSET	<u>19.64 LI</u>	
	14			LC	OCATION		ashoe (County, Nev	ada		ENGINEER		
	W	6		BC	ORING	11	5+88		r		EQUIPMENT		
	Å			Ε.	A. #	00	079-01-5	5		GROUNDWATER LEVEL	OPERATOR		
	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se			GI	ROUND EL	_{EV.} _15	534.63 (m)		DATE DEPTH m ELEV. m	METHOD	Trackhoe	
			1	HA	AMMER DR	OP SYS	STEMN	IA			BACKFILLED	_Yes	ATE 3/23/2000
	ELEV.	DEPTH	SA	MPLE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group	Moist, hard, dark brow	vn, Lean Clay t	o Fat Clay	
	1533.63	- - - - - - - -							CL	with Sand with estima 0.46 plastic fines, 15-20% trace fine gravel. Moist to slightly moist hard, red brown to pa Metasedimentary Bea close fractured, with r staining. Moderately to severel meters.	ated 80% media fine to coarse s , moderately ha le olive green, drock moderate noderate to mir y weathered zo	um to high sand, and ard to ely altered, nor oxide one to 0.55	
	1532.63	-2											
		-								2.74			
	1531 63	13											
	1551.05									No Hydrothermal Dep	osits Encounte	ered.	
		_											
		-											
		-											
	1530.63	-4											
	1520.63												
	1523.05												
		-											
	1528.63	-6											
		-											
	1527.63	-7											
		-											
		-											
1/01		_											
5/1,	1526.63	-8											
.GDT		-											
DOT		-											
N		-											
GPJ	4505 00												
15D.	1525.63	a											
0620		F											
0 TC		+											
		-											
~			1				1		1				

				-		. ເ	23/00			EXPLO	ORATIO	N LOG			
				S		://	23/00							445 00 "5	SHEET 1 OF 1
				El	ND DATE		0		vtenci	n Proioc	` †		STATION	115+96 "F	'2"
				JC	DB DESCRI	PTION	00C-1		xtensio	on Projec	л 		OFFSET	25.78 RT	
	.tm			LC	OCATION	VV		Jounity, INE	aua				ENGINEER	JRU ID 702	
	2MM			B	ORING	11	5+96			[EQUIPMENT	 	
	4			E.	A. #	00	79-01-5	5		GROU	NDWATER				
	n n n n n n n n n n n n n n n n n n n			G	ROUND EL	_{EV.} _15	32.82 (m)		DATE 3/23/00	DEPTH m NF	ELEV. m	METHOD	Trackhoe	
			1	H	AMMER DR	OP SYS		IA		0/20/00			BACKFILLED	_YesD	ATE 3/23/2000
		DEDTU	SA	MPLE	BLOW C	DUNT	-		11000						
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MATI	ERIAL DE	ESCRIPTION		REMARKS
		_							СН		Very mois	t, very stiff	to hard, dark bro	own, Fat	
		_							СП	0.46	10% fine t	o coarse sa	and.	illies,	
		-									Moist, ver	y stiff to ha	rd, brown, Lean	Clay with	
		-									fines, 20%	6 fine to coa	arse sand, 10%	fine gravel.	
	1531.82 -	-1							CI						
		_								1.83					
	1530.82 -	-2									Moist to s	lightly mois	t, hard, Lean Cl	ay with	
		-									fines, 10%	6 fine to coa	arse sand, 20%	fine to	
		-									coarse gra	avel.			
		-							CL						
		-													
	1529.82 -	3													
		3.35	5							3.35	Drumodi	um danaa	nala whita ta na	aab	
		- 3.66	14A	GRAE	8			MC, SA, PI		3.66	Hydrothe	rmal Depos	its slightly lamir	nated, low	
		-									specific gr	ravity. (Mate	erial has the soil	l index	
	1528.82 -	-4									Sand, with	n approxima	ately 5% non-pla	astic fines,	
		-									30% fine t	to coarse sa	and, 65% fine to	coarse	
		-									gravei.)				
	1527.82 -	-5													
	1021102	-													
		-													
		-													
		-													
	1526.82 -	-6													
		L													
		_													
	1525.82 -	-7													
		-													
		F													
/01		F													
5/11.	1524 82 -	L ₈													
3DT	1024.02	6													
OT.C		L													
		-													
٩		-													
5D.G	1523.82 -	-9													
7901		-													
200 -		Ĺ													
DOT		[
N															
ſ						2/	22/00			EXPL	ORATIO	N LOG			
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				S	TART DATE	<u> </u>	22/00							440.00.00	SHEET 1 OF 1
				E	ND DATE		1 5 9 0	 Eroowov E	vtonoir	n Droio			STATION	<u>116+06 "F</u>	2"
				J	OB DESCRI	PTION	1-00U		xiensi	on Projec	л		OFFSET	4.00 R I	
	Sm			LO	OCATION		asnoe (Jounty, Ne	ada				ENGINEER		
	2MM	6		B	ORING		6+06						EQUIPMENT	 Tim	
	Ą			E	.A. #	00	079-01-8	5		GROU					
	Ľ			G	ROUND EL	EV15	531.73 (m)		3/22/00	NE	ELEV. M	METHOD	Trackhoe	
				H	AMMER DR	OP SYS	STEM	IA					BACKFILLED	_YesD	ATE3/23/2000
ľ	ELEV. (m)	DEPTH (m)	SA NO.		BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		-							CL		Moist, har with Sand plastic fin	rd, dark brov d with estim es, 15-20%	wn, Lean Clay t ated 80% medit fine to coarse s	o Fat Clay um to high and, and	
		-								0.61	trace fine	to coarse g	ravel.	brown	
		_									Silty Sand	d with estim	ated 40% non-p	blown, blastic	
	1530.73	+1	2						SM		fines, 60%	6 fine to me	dium sand. Bas	e of unit	
		1.3	7 3A	GRAE	3			Chemical	_	1.37	valies ile				
		_									Dry, medi olive brow	ium dense t /n. Hvdroth	o dense, cream ermal Deposits	white to weakly to	
		1.83	3								moderate	ly laminated	with low densit	ty.	
	1529.73	-2	5 <u>3</u> B	GRAE	3				-						
		-													
		_													
	1528.73	-3													T (0.0
		-													lemp. = 10.6 deg. Cel.
		- 3.66	3												0
			30	GRAF	3			MC SA PL	-						
	1527.73		5 00		1					3.96					
		-													
		-													
	1526.73	-5													
		-													
		-													
		-													
	1525 73	<u>Γ</u> ₆													
	1525.75	_													
		-													
		-													
	1524.73	1													
		_													
-		-													
/11/0		-													
DT 5	1523.73	-8													
DT.G															
		F													
N N		F													
5D.G	1522.73	- 9													
79015		F													
T 00		Ĺ													
DO		Ļ													
≥															

						2/	22/00			EXPLO	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	22/00								SHEET 1 OF 1
				E	ND DATE	3/.	22/UU	Eroowey F	vtona	n Broice	~+		STATION	116+07 "	-3"
				JC	DB DESCRI	PTION	006-1			on Projec	л		OFFSET		
	24			LC	OCATION		asnoe (Jounty, Ne	/ada				ENGINEER		
	1 Mart	2		BC	ORING		6+07						EQUIPMENT	 	
	Ą			E.	A. #	0)79-01-5)		GROU					
	Ľ	~		GI	ROUND EL	EV15	533.03 (m)		3/22/00	NE		METHOD	Trackhoe	
				HA	AMMER DR	OP SYS	STEM _N	IA					BACKFILLED	Yes	ATE 3/23/2000
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	ESCRIPTION		REMARKS
		_									Moist, har	d, dark bro	wn, Lean Clay t	o Fat Clay	
		-							CL	0.55	plastic fine	es, 15-20%	fine to coarse	sand, trace	
		_								0.55	fine to coa	arse gravel.	ately hard to ha	rd pale	-
		- 8:91	a۵	GRAB							white and	red to pale	to dark olive gr	reen,	
	1532.03 -	_1	-34						1		Metasedir slightly alt	nentary Be ered. close	drock moderate fractured.	ely to	
		- 150									Moderatel	y to severe	ly weathered to	1.0	
		- 1.68	9B	GRAB	8						Moderate	to abundar	nt oxide staining	at 1.2 to	
		-									1.8 meters	S.	Ū		
	1531.03 -	-2													
		2.44													
		2.59	9C	GRAB					-						
		-								2.90					
	1530.03 -	-3													
		-									No Hydrot	thermal De	posits Encounte	ered.	
		[
		-													
	1529.03 -	-4													
		-													
		_													
	1528.03 -	-5													
		-													
		_													
	1527.03 -	-6													
		-													
		-													
	1526.03 -	-7													
		-													
		-													
/01		Ľ													
5/11	1525.03 -	-8													
GDT		F													
DOT		F													
N		-													
GPJ	1524 02 -														
015D.	1524.03	- 3													
06700		-													
DT (-													
NV_C		-													

						3/	22/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	22/00						SHEET 1 OF 1
				El	ND DATE	3/.	22/00	 		n Drainat	STATION	<u>116+43 "F</u>	2"
				JC	DB DESCRI	PTION	1-580		xtensio	n Project	OFFSET	<u>1.44 R I</u>	
				LC	OCATION		ashoe (Jounty, Nev	ada		ENGINEER		
	1 Mm	6		B	ORING	11	6+43		r		EQUIPMENT	 	
	Z.			E.	A. #	00	079-01-5)					
	Ž.			G	ROUND EL	EV15	527.10 (m)	F	3/22/00 NE	METHOD	Trackhoe	
				H	AMMER DR	OP SYS	STEMN	IA			BACKFILLED	_YesD	ATE <u>3/23/2000</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-							CI	Moist, very stiff to har	d, dark brown, with estimated	Lean Clay	
		-								0.46 medium to high plasti	c fines, 20% fin	e to	
		-								Moist to slightly moist	. moderately ha	ard to	
	1506 10	-								hard, pale to dark oliv	e brown and gr	een,	
	1526.10									close to very close fra	actured with abu	indant iron	
		-								oxide staining.			
		-											
		-											
	1525.10	-2											
		-											
		-											
		-											
	1524.10	-3											
		-											
		-											
	1523.10	-4											
		-											
		-											
	1522.10	-5											
		-											
										5.49			No
		_											Hydrothermal
	1521.10	-6											Sinter Encountered.
		-											
		Ľ											
	1520.10	-7											
		-											
		-											
/01													
5/11	1519.10	-8											
GDT		-											
DOT		-											
N		F											
GPJ	1518 10 -												
015D	1010.10	ļ											
0079		+											
TOC		-											
NV_L		-											

				-		. a/	30/08			EXPL	ORATIO	N LOG			
				ST		<u> </u>	30/98								SHEET 1 OF 2
				EI			1-280	Freeway F	vtenciu	n Proie	ct		STATION	11/+00 "H	
				JC	DB DESCRI	PTION			vada				OFFSET	KI MG	
	- Star			LC	DCATION			Journy, Nev	aud					Acker	
	5 Mr W			BC	ORING		7+00			0001				Peterson	
	4			E.	A. #		00.44))				ELEVEL	DRILLING		
	2u			GI	ROUND EL	EV15	23.11 (m)		9/30/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS		cope - Cathe	ead				BACKFILLED	YesD	ATE9/30/1998_
	ELEV.	DEPTH	SAI		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		ΜΑΤΙ	ERIAL DE	SCRIPTION		REMARKS
-	(m)	(m) 0.00	NO.		Increments	<u>300 mm</u>	Recov'd		Gloup		Verv soft.	highly wea	thered, highly fr	actured.	
											light grey	Metasedim	entary Bedrock	. Some	
											alteration	to clay min	eralogy.		
		_	А					w, PI, Sv							
1:	522.11 -	-1													
		-													
		1.52							4						
		L													
15	521.11 -	-2													
		-	в					w. PL Sv							
		-													
		Ľ													
15	520.11 -														
		-								3 35					
		-	С					w, PI, Sv		0.00	Moderate	ly hard, slig	htly weathered,	highly	
		- 3.66							-		fractured I mudstone	interbedde	entary Bedrock d.	with	
15	519.11 -	3.96 	U						-						
		-													
		-	F												
		-	_												
1:	518.11 -	_ 5 5.06													
		-	F												
		- 5.49								5.49					
		-	G								grey Meta	ntiy weathe I sedimenta i	red, highly fract r y Bedrock .	ured, dark	
15	517.11 -	6 6 10	G								0,		•		
		-							1						
		-	н								Brick red	clav seam 8	3 cm, thick		
		6.96													
1!	516.11 -	- 0.00							4						
		ŀ	I												
		7.53													
/01		-]						
5/11.	515 11 -	8													
ED 1	515.11		J												
DOT.		-													
N		- 8.69							-		Extremely	fractured v	vith brick red cla	ay infilling.	
GPJ	= 1 1 1 4		ĸ												
015D.	J14.11 -	- 9.27													
0079(-							1						
DT (-	1					W PL SV							
N<		-													

						/۵	30/08			EXPLO	ORATIO	N LOG			
				S	TART DATE	<u> </u>	20/90								SHEET 2 OF 2
				EI	ND DATE	9/	30/90	 					STATION	117+00 "P"	
				JC	OB DESCRI	PTION	1-580	Freeway E	xtensio	on Projec	:1		OFFSET	27.08 RT	
	-			LC	OCATION		ashoe	County, Nev	ada				ENGINEER	NG Ackor	
	2Mrd	C S		B	ORING	11	7+00]	EQUIPMENT	Peterson	
	Z.			E.	.A. #	0	079-01-8)		GROU		LEVEL	DRILLING		
	2c			G	ROUND EL	EV15	23.11 (m)		9/30/98	NE	ELEV. III	METHOD	HQ Core	
				H.	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead				BACKFILLED	Yes DAT	E9/30/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
		10.18	N.4						-						
		10.30	IVI						-						
		-													
	1512 11	- 													
	1012.111	-	N												
		-								11 58					
		11.77								11.50	Soft, high	y weathere	ed, shattered, light	grey	
	1511 11	- 12:0.40	0								Metasedir	mentary Be	edrock.		
		12:18							-						
		-													
		-	Р												
	1510 11	-13													
	1010.11										Soft highly	y plastic fai	ult gouge 0.5 mete	rs thick.	
		13.38							-						
		-	0												
	1509 11	- 144 4 44	Q								Extremely	shattered.			
	1000.11	- 14.11							-						
		-													
		-													
	1508.11	- 15	R												
		-													
		15.54								15.54					
		_													
	1507.11	-16													
		_													
		-													
		-													
	1506.11	-17													
		_													
		-													
/01		-													
5/11	1505.11	-18													
GDT	1000.111														
DOT		-													
N		-													
.GPJ	1504 11 ·	-19													
015D															
0079		-													
Ъ		-													
N		Γ													

							/۵	30/08			EXPL	ORATIO	N LOG			
					S	TART DATE	<u> </u>	20/90								SHEET 1 OF 1
					El	ND DATE	9/	30/96	 			-4		STATION	118+51 "I	P"
		/			JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	on Proje	Ct		OFFSET	14.66 RT	
					LC	OCATION		asnoe (County, Ne	/ada				ENGINEER	Acker	
	1 Mr				B	ORING	11	8+50						EQUIPMENT	Peterson	
	Ä		<1		E.	A. #	00	079-01-8	5		GROU	NDWATER			1 6(613011	
	Ű.				G	ROUND EL	EV15	504.58 (m)		DATE 9/30/98	DEPTH m NF	ELEV. m	METHOD	HQ Core	
			11	1	H	AMMER DR	OP SYS	STEM_F	Rope - Cath	ead	0,00,00			BACKFILLED	Yes D	DATE 9/30/1998
	FI FV		FPTH	SAI	MPLE	BLOW CO	OUNT	Dereent		USCS						DEMARKO
	(m)		(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB IESIS	Group		IVIATI		SCRIPTION		REMARKS
		-	0.00									to dark are	rd, highly w ev Metasec	eathered, shatte limentary Bedro	ered, grey Ick.	
		-		^								5	,	,		
		-		A					W, PI, SV							
	1503 58	Ē,	1 07													
	1000.00	-								1						
		-	1.52	В												
		-								1						
	4500 50	F.		С								Extremely	shattered.			
	1502.58	Ľ	2.19													
		-	2 53	D												
		-	2.00							1						
		-		_												
	1501.58	+:	3	E												
			3.41													
		-														
		-		F								Slightly le	ss fractured	1.		
	1500.58	+'	l 4.21													
				_						1						
			4.66	G								Minor clay	/ in fracture	c		
		-										winter elay		0.		
	1499.58	+5	5	н												
		-	5.58							-						
		-		I												
	1498.58	+•	6.10								6.10					-
		-														
	1497.58	+7	,													
		-														
1/01		-														
T 5/1	1496.58	+8	3													
T.GD		\vdash														
DO		F														
N																
Э.GР,	1495.58	4)													
3 015[+														
3 <u>7</u> 00		-														
DOT																
N																

							0/-	11/00			EXPLORATION LOG			
					ST	ART DATE	<u> </u>	11/99						SHEET 1 OF 1
					EN	D DATE	9/	11/99		vtopoli	n Droiget	STATION	<u>118+66 "F</u>	
					JO	B DESCRI	PTION	1-580		xtensio	on Project	OFFSET	4.21 LI	
					LO	CATION		asnoe (Jounty, Nev	ada		ENGINEER	Ackor	
	2Wm				BO	RING		8+70				EQUIPMENT	Peterson	
	Ą		_		E.A	\. #	00	079-01-5	D		GROUNDWATER LEVEL			
	Ľ				GR	OUND EL	EV15	01.49 (<u>m)</u>		9/11/99 NE	METHOD	HQ Core	
				-	HA	MMER DR	OP SYS	STEMF	Rope - Cathe	ead		BACKFILLED	_YesD	ATE9/14/1999
	ELEV. (m)	DEPT (m)	H N	SAMF O. T	PLE YPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.	.00 4	×					w, PI, Sv		Soft, completely to hi	ghly weathered	, olive	
		-									grey brown metasea	memary Dearo	GR.	
		-												
	4500.40													
	1500.49													
		- 1	52											
		-	. <u>52</u> F	3 9	SPT	20	50/76			-				
		1.	.83			50/76	00,10			-				
	1499.49	-2												
											2.44			
		-									Slightly hard, highly f	ractured, grey		
		-									Hydrothermally weath	nered fractures.		
	1498.49	-3												
		-												
		-	00											
	1497.49	-4	.96		т	20	50/11/			-				
		- 4.	.27			50/114	50/114			-				
		-												
	1496.49	-5												
		-												
		- 5.	.49		то	50	50			-				
				+		50				1				
	1495.49	⊢ 6												
	-	F												
		F												
		Ľ												
	1494 49	7 .	.01											
		7.	.16 E	= 5	SPT	50/127	50/127			4				
		-												
01		-									7.77			
5/11/	1402 40	L.												
3DT	1493.49	δ												
DT.C		-												
		-												
- L H		-												
15D.C	1492.49	1 9												
.06 <i>L</i> C		F												
DT 0(-												
		-												
z		1						1	1	1	1			

							0/	10/00			EXPLORATION LOG			
					ST	FART DATE	<u> </u>	10/99						SHEET 1 OF 2
					E	ND DATE	9/	10/99		vtona	n Project	STATION	119+37 "P"	
					JC	DB DESCRI	PTION	1-580		xtensi	on Project	OFFSET	21.68 RT	
	alter.				LC	OCATION			Jounty, Ne	ada		ENGINEER		
	2 Mrt	e	5		BC	ORING		9+32				EQUIPMENT	Peterson	
	Z				E.	A. #	0)79-01-	5					
	Ľ	/			GI	ROUND EL	EV14	76.73 ((m)		9/10/99 NE	METHOD	HQ Core	
					HA	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	_YesDAT	E9/14/1999
	ELEV. (m)	DEI (r	PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_	0.00	A					w, PI, Sv		Moist, dense to very o Sand residual soil wit	dense, olive bro h estimated 30-	wn Silty 40% low	
		-									plastic fines, 60-70%	fine sand. Mino	or coarser	
		-									sand and gravel.			
	4 475 70									SM				
	1475.73													
		_	1 52											
		-	1.52	В					w, PI, Sv	1				
		-									1.83 Soft_completely_west	hered highly fr	actured	
	1474.73	<u>+</u> 2									dark grey Metasedim	entary Bedrock	L.	
			2.44											
		_	0.74	С	SPT	27	50/114			1				
		-	2.74			50/114				-				
	1473.73	-3												
		-												
		_									Soft and completely v	veathered.		
	1472.73	-4	3.96	_	0.07	31				-				
		-	4.27	D	SPI	50/25	50/25			4				
		-												
	1471.73	-5												
		-									5.18 Slightly bard, bigbly w	eathered high	N .	
			5.49	_	0.07						fractured, dark grey N	letasedimentar	y	
			5.64	E	SPT	50	50			-	Bedrock.			
	1470 72	-												
	1470.73	_ 0												
		-												
		-												
		-	6.86	_	6	32				-	Highly shattered			
	1469.73	† 7	7.16	F	SPT	50/76	50/76			4				
Ļ		_												
/11/0		F												
JT 5,	1468.73	-8	8.08	0	CDT	50/76	50/76			-	Lighty shottored			
DT.GI		Ē	0.23	9	571	30/70	50/70			1	rigniy snattered.			
N		F												
D.GF	1467.73	- 9												
9015		-												
- 007		Ľ												
DO														
Ň														

ſ				_		Q/	10/00			EXPLORATION LOG			
				S	TART DATE	= <u>-3/</u>	10/00						SHEET 2 OF 2
				EI	ND DATE		10/99	 Eroowov E	vtonoio	n Brojaat	STATION	<u>119+37 "P"</u>	·
				JC	OB DESCRI		1-500				OFFSET		
	2m			LC	OCATION			Jounty, Ne	ada		ENGINEER	Acker	
	2 Mrd			B	ORING		9+32	-	r			Peterson	
	4			E.	.A. #		79-01-5	<u>,</u>		GROUNDWATER LEVEL			
	2ª			G	ROUND EL	.EV14	-76.73 (m)	ŀ	9/10/99 NE	METHOD	HQ Core	
			1	H.	AMMER DF	ROP SYS	STEM	lope - Cath	ead		BACKFILLED	Yes DA	TE <u>9/14/1999</u>
ľ	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
ŀ	(m)	(m) 10.06	но.	SDT	50/102	300 mm	Recov'd						
			''		50/102	50/102			-				
		_											
		_											
	1465.73	-11											
		-											
		- 11.52		SPT	50/127	50/127			_	Thin zone of hydrothe	rmal alteration		
		-			00/12/	00/12/			- 	11.83			
	1464.73	-12								Moderately hard, weat dark grev Metasedime	thered, highly f entarv Bedrock	ractured,	
		-									, ,	-	
		_											
		_											
	1463.73	-1313.05		CDT	50/51	50/51			_				
		13.20	J		50/51	50/51			-				
		_											
		_											
	1462.73	-14											
		-											
		_								Soft, completely weath	nered zone.		
		14.78	K	CDT	50/25	50/25			_	Soft, completely weath	hered zone.		
	1461.73			Jor 1	30/23	30/23			-				
		-											
		_											
	1460.73	-16											
		-											
		-											
		_											
	1459.73	-17											
		-											
		-											
1/01		_											
Γ 5/1	1458.73												
T.GD		-											
DO		F											
∧ ר		F											
D.GP	1457.73	-19											
9015		F											
007		Ĺ								19.51			
DOD		Ļ											
≥													

						<u>م</u> /	28/08			EXPLORATION LOG		
				S		<u> </u>	20/02				440.07 "5	SHEET 1 OF 2
				El	ND DATE		1-280	Freeway E	vtonci	STATION STATION	119+97 "F	,
				JC	DB DESCRI	PTION	1-000		vada	OFFSET	MG	
	an .			LC	DCATION	10			aud	ENGINEER	Acker	
	× NA			BO	DRING		.0+00 170_01_F	5			Peterson	
	17.			E.	A. #	1/	60 01 (m)		DATE DEPTH m ELEV. m DRILLING		
	Ve			G	ROUND EL	EV14	109.91 (lin) Pope - Cath		9/29/98 NE METHOD		0/20/1008
				H	AMMER DR	OP SYS	STEM			BACKFILLED	D,	ATE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION		REMARKS
		0.00	A					w, PI, Sv		Moist, dense, brown to grey, highly va Clayey Gravelly Sand colluvium with	ariable up to	
		-								30-40% high plastic fines.		
	1468.91	1							60			
		1.22	в					w, PI, Sv	30			
		- 1.52	c					w PL Sv	_			
	1467.91	-2								2.12		
		-								Soft to moderately hard, highly weath	ered,	
		-								shattered, dark grey Metasedimentar Bedrock	у	
		-								Very thin clay fracture infilling.		
	1466.91											
		-										9-28-98/9-29-98
		-										
		-										
	1465 91	_										
	1400.01	- 4.27	Ē							meters thick.	lly clay 0.3	
		-	L									
		-										
	1464 01	- 4.88	F						_			
	1404.91									High plastic clay seam 5 cm. thick.		
		-										
		-										
	4 400 04											
	1463.91	-0										
		6.40	G						_			
		6.71	н							Soft clay seam 8 cm. thick. ppm = 1.	0	
		-										
	1462.91	† ′										
		- 7.47										
Ц		-]	Clay coom 8 om thick		
5/11/0		- 7.86	J						-			
DT 5	1461.91	8								Highly shattered with high clay conter fractures	nt in	
OT.G		8 50										
۲ کړ		- 0.00	K						-	Possible fault gouge.		
A Ld		F										
5D.G	1460.91	9 9.14						W PL Sv				
17901								w, i i, ov				
DT 00		0.75								0.75		
/_DC		9.75	M							Moderately hard to hard. weathered.	highly	
ź		1					<u> </u>				3,	

						0/	20/00			EXPLC	ORATIO	N LOG			
				S	TART DATE	<u> </u>	20/90								SHEET 2 OF 2
				El	ND DATE	9/.	29/90	 					STATION	<u>119+97 "P"</u>	
				JC	OB DESCRI	PTION	1-580	Freeway E		on Projec	t		OFFSET	<u>11.20 RT</u>	
	. Int			LC	OCATION		ashoe (County, Nev	ada				ENGINEER	Acker	
	1 MM			B	ORING	12	20+00		r]	EQUIPMENT	Peterson	
	Å			E.	.A. #	00	79-01-5	5		GROUN				1 6(613011	
				G	ROUND EL	EV14	69.91 (m)		DATE 9/29/98	DEPTH m NF	ELEV. m	METHOD	HQ Core	
			1	H.	AMMER DR	OP SYS	STEM_R	Rope - Cathe	ead	0/20/00			BACKFILLED	Yes DA	TE <u>9/29/1998</u>
		DEDTU	SA	MPLE	BLOW C	OUNT			11808						
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MAII	ERIAL DE	SCRIPTION		REMARKS
		10.2	I N						_		fractured t Bedrock	to shattered	l, grey Metased	imentary	
		_ 10.42	0						-		Douroon				
		10.76	5												
	1459.04	11110													
	1458.91	- 1111.00	° Q						-						
		11.3	R						-						
		-													
		- 11.98	3 -												
	1457.91	-12	S						-						
		12.4	1 _T												
		-													
		-													
	1456.91	+13													
		_ 13.2	³ U						-						
			V												
		- 13.8	7												
	1455.91	-14	W												
		-								14.17					
		-													
		-													
	1454.91	-15													
		-													
		-													
		-													
	4 450 04	-													
	1453.91	16													
		_													
		-													
		-													
	1452.91	+17													
11/01		-													
T 5/·	1451.91	-18													
T.GD		F													
DO		F													
N		Ľ													
C.GP.	1450.91	-19													
015E		-													
0079		+													
ĎŢ		F													
NV_E		-													

					-		a/	8/99			EXPL	ORATIO	N LOG			
					S		=	9/99							400.00 ""	SHEET 1 OF 3
)		El	ND DATE		1-280	Freeway F	vtenci	n Proie	ct		STATION	120+08 "P	
					JC	DB DESCRI	PTION	ashoo (vada				OFFSET	MG	
	alm-	· · · · ·			LC	CATION	10		Journy, Nev	aua					Acker	
	×.	b	5		B	ORING					000				Peterson	
	1 m				E.	.A. #		79-01-0) m)		DATE		ELEVEL	DRILLING		
	le				G	ROUND EL	EV14	13.93 (m) Nana Cathr		9/9/99	NE		METHOD	HQ Core	0/14/4000
		N			H	AMMER DR	OP SYS	STEM _	tope - Cathe	ead_				BACKFILLED	YesD/	ATE
	ELEV.	DE	PTH	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
	(11)					Increments	300 mm	Recova				Soft to mo	derately ha	ard, weathered,	highly	
												fractured f	to shattered mentary Be	d, olive grey to g drock	Irey	
		-											,, ,			
		-														
	1472.93	+1														
		-														
		-														
	1471.93 ·	<u>+</u> 2	0.00													
		_	2.29	^	ерт	22	E0/E1			1						
		_	2.59	A	561	50/51	50/51		W, PI, SV	-						
		-														
	1470.93	-3														
		-														
		-														
	1469.93	-4	4.11			21				-						
		_	4.42	В	SPT	50/76	50/76		w, PI, Sv	-						
		-														
	4 400 00	-														
	1468.93	– 5														
		-														
		-	5.64	-		29				-						
	1467 02		5.94	С	SPT	50/51	50/51			-						
	1401.93	- 0														
		-										Thin light	arey to wh	ite high plastic	clav	
		-										fracture in	filling.	ino, mgn pidolio	oldy	
	1466 93	Ĺ,														
	1100.00	-	7.32													
		-	7.47	D	SPT	50/76	50/76									
/01		F														
5/11	1465.93	<u>_</u> я														
GDT	1 100.00	-														
DOT.		-														
N		-	8.69			31				-						
GPJ	1464.93	_ <u>_</u>	8.99	E	SPT	50/76	50/76			-						
015D		Ļ														
0079		╞														
DOT		Ľ														
N																

						Q/	8/00			EXPLORATION LOG			
				S	FART DATE	<u> </u>	0/00						SHEET 2 OF 3
				El	ND DATE		1 5 90	Ereewoy E	vtonoio	n Drojaat	STATION	120+08 "P	
				JC	DB DESCRI	PTION	1-000		vodo		OFFSET		
	- Arr			LC	DCATION	10		Journy, Nev	aua		ENGINEER	Acker	
	WWW B			B	ORING				[Peterson	
	1 m			E.	A. #)		DATE DEPTH m ELEVEL	DRILLING		
	2e			G	ROUND EL	EV14	13.93 (m)		9/9/99 NE	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEM R	ope - Cathe	ead		BACKFILLED	Yes DA	TE 9/14/1999
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd		Cibup				
		_											
		-											
	1462.93	-11											
		-											
		_											
	1461.93	-12											
		-											
		-											
	1460.93	-13											
		-											
		-											
	1459.93	-14											
		-											
		-											
		-											
	1458 93	-15											
		-											
		-											
		-											
	1457 02	16											
	1407.00	16.31											
		- 16.46	F	SPT	50/76	50/76			-	Highly shattered.			
		F											
	1456.00	17											
	1400.93	_''											
		F											
01		-											
5/11/	4455.00	-											
DT	1455.93	18								Turne to hard and his	hly fractured wi	th minor	
DT.G		Ļ								clay infilling.	iny nactured WI		
NV		F											
I L L E		+											
15D.C	1454.93	19											
0620		Ļ											
OT 0		F											
NV_D		_								Soft and shattered w	ith clay infilling.		

Ĩ							0/	e/00			EXPLO	ORATIO	N LOG			
					ST	FART DATE	<u> </u>	0/99								SHEET 3 OF 3
					El	ND DATE	9/:	9/99		vtonoio	Droia			STATION	120+08 "P"	
					JC	DB DESCRI	PTION	006-1			i Piojec	л		OFFSET	2.15 LI	
	2m				LC	DCATION			Jounty, Nev	ada				ENGINEER		
	2Mm				BC	ORING	12	20+08	-	— r]		Peterson	
	4				E.	A. #		79-01-5	<u>,</u>					DRILLING		
	2				GI	ROUND EL	EV. <u>14</u>	73.93 (m)	— E	9/9/99	NE		METHOD	HQ Core	
			7/		HA	AMMER DF	ROP SYS	STEM _	tope - Cathe	ead				BACKFILLED	Yes DA	TE 9/14/1999
	ELEV.	DEPT	гн	SAN		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	1	NO.		Increments	300 mm	Recov'd		Cloup						
		-														
		-														
	1452.93	-21														
		-										0				
												Slightly ha	ard and higi	nly shattered.		
		-														
	1451.93	-22														
		-														
		-														
	1450.93	-23														
		Ľ														
		-														
		-										Zones of	moderatelv	hard rock.		
	1449.93	-24										_0.100 0.				
		_														
		-														
	1448.93	-25														
		_														
		-														
	1447.93	-26														
		26	.61	~	ODT	50/70	50/70			-						
		- 26	0.70	G	571	50/76	01/0									
	1446.93	-27														
		Ľ														
-		+														
/11/0		F														
DT 5	1445.93	-28														
OT.G		F														
D N		-														
1 L LE		F														
15D.G	1444.93	29														
0620		F														
DT 0		F														
JV_D		+									29.87					
~		1					1	1		1						

							0/	2/00			EXPLORATION LOG			
					S	TART DATE	<u>= 9//</u>	2/99						SHEET 1 OF 1
					El	ND DATE	9/.	2/99	 		n Drainat	STATION	120+70 "P	
					JC	DB DESCRI	PTION	1-580	Freeway E		n Project	OFFSET	10.12 RT	
	. Day				LC	OCATION		ashoe (County, Nev	ada		ENGINEER	Advar	
	2MM	b	5		B	ORING	12	20+70		r		EQUIPMENT	Peterson	
	Ä		<1		E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL		1 6(613011	
	7				G	ROUND EL	EV14	89.21 (m)	ł	DATE DEPTH ELEV. m 9/2/99 NF	METHOD	HQ Core	
			\mathbf{v}	1	H	AMMER DR	ROP SYS	STEM_R	ope - Cathe	ead		BACKFILLED	_YesDA	ATE9/3/1999
	ELEV.	DE	PTH	SA	MPLE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	((m)	NO.	TYPE	Increments	300 mm	Recov'd	2.2.12.12.10	Group	Soft to slightly hard h	highly to comple	atoly	
		-									Metasedimentary Ben fractures.	, olive to grey b drock. High pla	rown stic clay in	
	1488.21	+1												
		-												
			1.52	Δ	SDT	50/76	50/76			-				
			1.00	A	JF1	50/70	50/70			-				
	1487.21	+2												
		-												
			2.44	В	SPT	50/102	50/102			-	Minor clay in fractures	s to bottom of h	ole	
						00,102	00,102						010.	
	1486 21	3												
	1400.21													
		-												
		-												
		-	3.96											
	1485.21	-4	4.11	С	SPT	50/127	50/127							
		-												
		-												
	1484.21	+5												
		-	- 10											
			5.49 5.64	D	SPT	50/127	50/127			-				
		_								1				
	1483.21	+6												
		-	6.25	-	CDT	50/76	50/76			-				
			0.40	E	501	50/76	50/76			-				
		-												
	1482 21													
	1102.21	-												
		-												
11		-												
5/11/(-	7.92							1				
DT (1481.21	-8	8.08	F	SPT	50/51	50/51			-				
OT.G														
D_ N		-	8.69								8.69			
N N		-	8.84	G	SPT	50/0	50/0			-				
5D.G	1480.21	+9												
79015		F												
T 00		Ľ												
DO		L												
N														

				-		_ a/	11/98			EXPL	ORATIO	N LOG			
				S		= <u>-3/</u> 0/	11/98							404 - 50 "5	SHEET 1 OF 1
				El	ND DATE	<u>- 3/</u>	1,50	Freeway F	vtensi	n Proie	ct		STATION	121+58 "P	
				JC	DB DESCRI	PTION W	ashoa (vada		51		OFFSET	MG	
	200			LC	OCATION	12	23100 0	Sounty, Nev	aua					Acker	
	Mar			B	ORING		70 01 4	5		CROU				Peterson	
	4			E.	.A. #		105 29 (5 (m)		DATE	DEPTH m	ELEVEL	DRILLING		
	Ve			G	ROUND EL	EV14	190.20 (E	III) Pono Coth		9/11/98	NE		METHOD		0/11/1009
				H	AMMER DR	OP SYS	STEM	tope - Caline	eau				BACKFILLED	D/	ATE 9/11/1998
ELE (n	EV. n)	DEPTH (m)	H NO		BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
		0.0	00								grey Meta	ghtly hard, : I sedimenta	shattered, weath ry Bedrock . Zor	nered, nes of	
		_	А					w, PI, Sv			weatherin	g to clay fro	om		
		_									wica.				
1494	.28 -	1	91						-						
		_	в												
		- 1.5	52												
		_													
1493	8.28 -	-2													
		_	6					W PL SV			Hard, sha	ttered, wea	thered fractures	, dark grey	
		_						w, i i, ov			Marble.				
		_													
1492	.28 -		05												
		_]						
		_													
		_													
1491	28 -		D									00			
	.20	-									Vold at 3.	96 meters.			
		4.5	57												
									1						
1490).28 -	-5													
		-													
		_	E												
		_													
1489	.28 -	6 61	10							6 10					
	-	-	F					 w, PI, Sv		0.10					
		_													
1488	8.28 -	-7													
	-	_													
		_													
/01		_													
1/12	28 -	-8													
	.20	-													
DOT.		_													
≷		-													
GB 1400	20.	-													
1400 112D.	.20 -	_ສ _													
0079		_													
TO		-													
		_													

						. a/·	11/98			EXPL	ORATIO	N LOG			
				ST		<u> </u>	11/98							400.00 "	SHEET 1 OF 1
				E١		<u> </u>	1,30 _500		vtenci	n Proio	~t		STATION	123+09	P*
				JC	DB DESCRI	PTION	2500-1-00		vada				OFFSET	0.62 L I	
14				LC	DCATION	10	2100		aua					Acker	
×	z ≪	5		BC	DRING			5		CROU				Peterson	
	Į į			E.,	A. #		00 74 (5 (m)		DATE	DEPTH m	ELEVEL	DRILLING		
	Ve			GI	ROUND EL	EV14	-99.74 (E	III) Pono Coth		9/11/98	NE		METHOD		0/11/1009
		777		HA	AMMER DR	OP SYS	STEM	tope - Caline	eau_				BACKFILLED		DATE
ELEV. (m)	DE (PTH m)	SAN NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
	-	0.00									Soft to ha weathered	rd, shattere d, dark gree	ed to extremely seen grey Metased	shattered, limentary	
	-		А					w, PI, Sv			Bedrock.	Weathered	to zones of hig	h plastic	
	-										Ciay ITOITI	0 - 1.5 met	ers.		
1498.74	-1	0.91							_						
	-														
	-	1.52	B												
	-	1.83	Ŭ					w, i i, ov							
1497.74	-2								-						
	-														
	-														
	-		D												
1496 74	3										Possible shattered	shear plane with variab	of landslide. Hi le color and hig	ghly hlv	
1100.71	-	2 25									weathered	d with thin o	lay infilling in la	rger	
	-	3.55							-		fractures.				
	-														
1495 74			Е								Hard, slig	htly fracture	ed, slightly weat	hered, light	
1100.11	- '										grey with	thin clay ini	illing from 3.8 -	4.3 meters.	
		4.42							_		Shattered	with clay ir	nfilling in fracture	es.	
	-		G					w, PI, Sv	-						
1494 74	5														
	-		F					w, PI, Sv, Sh							
	-														
	-														
1493 74	-6	5.94								5.94					-
	Ļ														
	-														
	-														
1492 74	Ĺ,														
	ŀ														
	-														
/01	-														
2/11/01 74	Ļ.														
	- 0														
DOT.	\vdash														
Ž	-														
	Ĺ														
1490.74	⊢ 9														
0079	-														
TOC	F														
	-														

						. q/	10/98			EXPLO	DRATION LOG			
				S -		= <u>-0/</u> 9/	10/98							SHEET 1 OF 3
				Eľ	ND DATE		10/30	 Freeway F	vtonci	on Projec	·+	STATION	124+57 "P"	
				JC	DB DESCRI	PTION	2500		vada			- OFFSET	MG	
	- Am			LC	DCATION			Sounty, Nev	aua			ENGINEER	Acker	
	S. Way	C A		B	ORING		24+50	_		000			Peterson	
	-			E.	A. #		179-01-	о			DEPTH m ELEV m			
	2ª			G	ROUND EL	EV15	612.71 (m)		9/10/98	NE	METHOD	HQ Core	
				H	AMMER DR	OP SYS	STEMF	Rope - Cathe	ead			BACKFILLED	_YesDAT	re <u>9/10/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MATERIAL I	DESCRIPTION		REMARKS
		0.00)								Moist, stiff, grey bro	own Sandy Clay	vith	
		_	А					w, PI, Sv	СП		coarse sand.	n plastic fines, 30	% fine to	
		0.61							СП					
		-								0.91				
	1511.71 -	-1									Soft, extremely we	athered, brown B a	asalt.	
			в											
		_								1.52	Hard slightly weat	pered to highly we	athered	
		_									fractured to shatter	ed Vesicular Bas	alt.	
	1510.71 -	2 2.13												
		-							1					
		-	6								Extremely fractured	d and highly weat	hered from	
		_									2.4 - 3.5 meters.	0 7		
	1509.71 -													
		_												
		-												
		-	_											
	1509 71		D					w, PI, Sv						
	1506.71 -	4												
		- 4 57	,											
		4.57							-		Soft and highly we	athered.		
		-								4.94				
	1507.71 -	-5									Very soft, fractured	, greenish tan, hi	ghly	
			Е								Metasedimentary I	Bedrock.	300	
		_												
		-												
	1506.71 -	6 6.10							4					
		-												
		Ĺ								6.55	Coff mottled and	froaturod to ab - "	arad	
		-	F					W PL SV			highly weathered N	letasedimentary	erea, Bedrock.	
	1505.71 -	-7						w, i i, ov				2		
		-												
		7 62	,											
1/01									1					
5/11	1504.71 -	-8												
GDT		F												
DOT.		-	G											
NV		-												
GPJ	4500 = 1	-												
15D.	1503./1 -	9.14							-					
0620		-												
0T 0		-												
۵ N		-	н								Thin high plastic cl	ay fracture infilling	g.	
~		1	1	1	L		1	1	1					

						0/	10/09			EXPLORATION LOG		
				S	TART DATE	<u> </u>	10/90					SHEET 2 OF 3
				El	ND DATE	9/	10/98	 		n Drainat	STATION124+57 "F	D"
				JC	DB DESCRI	PTION	1-580		xtensi	on Project	OFFSET 17.41 RI	
		``````````````````````````````````````		LC	OCATION		ashoe (	County, Nev	ada		ENGINEER MG	
	2MM	613		B	ORING	12	24+50				EQUIPMENT Acker	
	Ą			E.	A. #	00	079-01-5	5			DRILLING	
	Ľ	A		G	ROUND EL	EV15	512.71 (	m)		9/10/98 NE	METHOD HQ Core	
				H	AMMER DR	OP SYS	STEM _ R	lope - Cathe	ead		BACKFILLED Yes D	ATE <u>9/10/1998</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO	OUNT	Percent		USCS			PEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAD ILSIS	Group			REMARKS
		-										
		-										
		- 10.67							-			
	1501.71 -	-11										
		-										
		-	Т									
		-										
	1500.71 -	-12										
		12.19							-			
		-										
		-										
	1499 71 -	-13	J					w, PI, Sv		Soft, highly fractured,	dark grey to grey Phyllite	
	1400.71	_ 10								degraded to high plas	stic clay.	
		-										
		- 13.72							-			
	1/08 71 -	-11										
	1490.71	- 14										
		-	к							Slightly more compet	ent formation with less	
		-								clay alteration.		
	1407 71 -	- 15										
	1497.71	15.24										
		-										
		-										
	1 406 74	- 46										
	1490.71 -		L									
		_										
		16.76										
	1405 74	17							1	Very little clay in fract	ures - possible zone of	
	1495./1 -	["								igneous intrusion.		
		-										
11		-	М									
5/11/(		-										
DT :	1494.71 -	18										
DT.G		- 10.29							-			
NV_D		-										
I L L E		-										
15D.C	1493.71 -	- 19	Ν									
0620		Ļ										
OT 0		-										
ک_ ا		19.81							-			
2		L	1	1	1	1	1		1	1		

						0/-	10/09			EXPLO	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	10/90								SHEET 3 OF 3
				E١	ND DATE	9/	10/98	 			-1		STATION	124+57 "P"	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Projec	X.		OFFSET	<u>17.41 RI</u>	
				LC	OCATION		ashoe (	County, Nev	ada				ENGINEER		
	2MM	6		BC	ORING	12	4+50		r			]	EQUIPMENT	Peterson	
	Z.			E.	A. #	00	79-01-5	5		GROU					
	ž.			GI	ROUND EL	EV. 15	12.71 (	m)		9/10/98	NE	ELEV. M	METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM _R	lope - Cathe	ead				BACKFILLED	Yes DAT	E9/10/1998_
	ELEV.	DEPTH	SAI	MPLE	BLOW CO		Percent		USCS		МАТ				REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB 11313	Group						REMARKS
		-													
		-	0												
		_													
	1491.71 -	-21													
		21.34								21.34					
	1490.71 -	-22													
		-													
		_													
		_													
	1489.71 -	-23													
		-													
		_													
		_													
	1488.71 -	-24													
		-													
		_													
		-													
	1487.71 -	-25													
		-													
		_													
	1486.71 -	-26													
		-													
		_													
	1485.71 -	-27													
11/01		-													
JT 5/	1484.71 -	-28													
DT.GL															
Z_D		-													
NU		-													
5D.G	1483.71 -	-29													
7901															
)Т 00		-													
		-													
zl		1		1			1		1	1					

						_ a/	10/98			EXPLO	ORATIO	N LOG			
				ST		= 	10/98							400-40 "	SHEET 1 OF 2
		7		EN			I-580	Freeway F	xtensi	on Proiec	rt		STATION	120+10 "H	
				JC	DESCRI	PTION W	ashoe (		/ada		~		OFFSET	MG	
	22			LC		12	20/100 ( P6+00							Acker	
	N. A.			BC	DRING		179-01- <i>i</i>	5		GROU			OPERATOR	Peterson	
	1			E.	A. #	16	12 21 (	5 m)		DATE	DEPTH m	ELEV. m	DRILLING	HO Core	
				GI		EV	F	2000 - Cath		9/10/98	NE		METHOD		9/10/1998
				HA	AMMER DR	OP SYS	STEM						BACKFILLED	D	ATE
	ELEV.	DEPTH	SAI NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		ΜΑΤΙ	ERIAL DE	ESCRIPTION		REMARKS
	(11)	0.00			Increments	<u>300 mm</u>	Recova				Argillic ho	rizon with g	ravel and cobbl	es.	Casing placed
		_													to 1.2 meters.
		_	А												
		-							SC CH						
	1511.21 -	-1 1.22													
		- 4.50							-						
		-	С					W, PI, SV, Sh		1.68					
		_ 1.83	Ð					w, PI, Sv	_		Soft, sligh	tly fracture	d, brown <b>Clayey</b>	l Init has	
	1510.21 -	-2	В								the proper	rties of a sli	ghtly cemented	clayey	
		_									sand.				
		- 274													
		-							-						
	1509.21 -	<u>-3</u> 3.05	F					w, PI, Sv	_						
		3.35	G					w, PI, Sv	_						
		_	Е							3.66					
		-									Slightly ha	ard, fracture ed basalt w	ed, brown <b>Basal</b>	t Breccia. lavev Sand	
	1508.21 -	-4									matrix.	ou buoun n			
		- 4.27							-						
		_													
		-													
	1507.21 -	-5	н												
		_													
		- 570													
		5.79							-		Softer with	h more mat	rix of Silty and (	Clayey	
	1506.21 -	6									Sand.		,		
		_													
		-	Ι												
		_									Very loose	e Sand laye	er 0.15 meters tl	nick.	
	1505.21 -	-7													
		7.32							-						
Ц		-									Highly fre	oturod			
5/11/0		-									Fighty trac	clured.			
DT 5	1504.21 -	8	J												
OT.G		Ĺ								0.50					
		-								<u>8.53</u>	Hard, wea	athered, dai	k grey, highly fr	actured	
1 L HE		_ 8.84							-		Vesicular	Basalt.			
15D.C	1503.21 -	<b>9</b> 9.14	L					w, PI, Sv	-						
0620		F	_					, ,							
OT 0		F	к												
JV_D(		-													
2		1		1		1	1		1						L

						0/-	10/09			EXPLO	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	10/90								SHEET 2 OF 2
				E١	ND DATE	9/	10/98						STATION	126+10 "F	D"
				JC	DB DESCRI	PTION	1-580			on Projec	1		OFFSET	4.70 RT	
	24			LC	OCATION		asnoe (	Jounty, Nev	ada				ENGINEER		
	2Mm	6		BC	ORING		6+00						EQUIPMENT	Peterson	
	-			Ε.	A. #		079-01-5	<u>)</u>		GROU					
	Ž.			GI	ROUND EL	EV15	12.21 (	m)	<u> </u>	9/10/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM _ R	lope - Cathe	ead				BACKFILLED	_YesD	ATE 9/10/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		10.36													
		- 10.00													
		_													
	1501.21 -	-11													
		-	М												
		-													
		-								44.00					
	1500.21 -	- 11.89								11.89					
		_													
		-													
		-													
	1499 21 -	-13													
		-													
		-													
		-													
	1409.21														
	1430.21	-													
		-													
		-													
	1407.21	15													
	1497.21														
		-													
		-													
		-													
	1496.21 -	16													
		_													
		-													
		-													
	1495.21 -	-17													
÷		_													
/11/0		-													
DT 5	1494.21 -	- 18													
DT.G															
ĭ⊇		-													
L N N		-													
5D.G	1493.21 -	- 19													
7901.															
T 00		L													
D0		_													
ź															

					-		0	2/98			EXPLC	RATIO	N LOG			
					S		E	2/30							407.00 "	SHEET 1 OF 3
					El			1-280		vtencio	n Projec	t		STATION _	127+00 "F	,
					JC	DB DESCR	IPTION			vodo	ITFIOJEC	L		OFFSET _	27.79 KT	
	- Ann	à			LC	DCATION			county, Nev	aua				ENGINEER _	Acker	
	2 Mr. N				BO	ORING		27+00		r					Peterson	
	Z.				E.	A. #		J79-01-	<b>D</b>					DRILLING		
	Ĩ.	7			G	ROUND EI	_EV1	513.84 (	<u>m)</u>	ŀ	9/3/98	NE		METHOD _	HQ Core	
					H	AMMER D	ROP SY	STEM	Rope - Cathe	ead				BACKFILLED _	Yes D	ATE9/3/1998
	ELEV. (m)	DEPT (m)	ТН - )	SAN NO.	/PLE TYPE	BLOW C 150 mm	OUNT Last 300 mn	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		0	0.00									Hard, hig	hly fractured	l, grey, weathere	d Basalt	Casing placed
		-		Α								Deulock	•			to 0.0 meters.
		0	0.61							-						
	1510.04	-														
	1512.84 -			Б												
		-		в												
		-														
	4544.04	- 1	.89							-	2.01					
	1511.84 -	2										Soft, tan	to rust oran	ge, completely		
		-		с					w, PI, Sv			aecompo	osed Graniti	C Bedrock.		
		-														
		- 2	2.90							-						
	1510.84 -	_3														
		-														
		-		D					w. Pl. Sv							
		-							, , -			Very soft	formation fr	om 3 to 10.7 met	ters.	
	1509.84 -	4														
		4	.42													
		-														
		-														
	1508.84 -	-5		F												
		-		-												
		-														Losing
		5	5.94													formation to
	1507.84 -	-6														
		-		F												
		-		F					w, PI, Sv							
	1506.84 -	-7														
		- 7	.47													
÷		-					1			1						
/11/0		-														
DT 5.	1505.84 -	-8														
DT.G				G					w, PI, Sv							
N_D		F														
ΡIΝ		-	2 00													
5D.G	1504.84 -	-9 °	,							1						
17901																
<u>ЭТ 0С</u>		-														
		-		Н												
z		1					1		1	1	1					

						0/	2/00			EXPL	ORATIO	N LOG			
				S	TART DATE	<u> </u>	2/98								SHEET 2 OF 3
				EI	ND DATE	9/	3/98			- Desta	- 1		STATION	127+00 "I	"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	n Projec	CT		OFFSET	27.79 RT	
	and the			LC	OCATION		ashoe (	County, Nev	ada				ENGINEER	Acker	
	2MM			B	ORING	12	27+00		r				EQUIPMENT	Peterson	
	Ą			E.	A. #	00	079-01-5	5		GROU				1 01013011	
	ž			G	ROUND EL	EV15	513.84 (	m)	ł	9/3/98	NE	ELEV. M	METHOD	HQ Core	
			6	H	AMMER DR	OP SYS	STEM_R	Rope - Cathe	ead				BACKFILLED	Yes D	ATE 9/3/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL D	ESCRIPTION		REMARKS
		_													
		- 10.52													
		_													
	1502.84	-11									Zone of w	vhite, stiff, l	nigh plastic,	na datata	
		-									hydrother	mally alter	ed Clay 0.3 mete	ers thick.	
		-													
		_													
	1501.84														
	1001101	_									Slightly	oro compo	topt formation w	ith	
		-									fractures	at 30-50 de	egrees.		
		-													
	1500 84	- 13	J												
	1000.04	-													
		13.56													
		-							-						
	1/00 8/	-14													
	1433.04	-													
		-	K												
		-													
	1/09 9/	- 1515 00													
	1490.04	- 1015.09							-						
		_													9-2-98 / 9-3-98
		-													
	1407.04	-	L					w, PI, Sv							
	1497.84	- 16													
		_													
		16.61							-						
	1406.04	47													
	1496.84	<b>_</b> ''													Lost all
		_	М												circulation in
10		-													recovery from
5/11/(		-													16.7 to 21 meters.
DT :	1495.84	¹⁸ 18.14							-						
DT.G		-													
		-													
I L L E		+	N												
15D.(	1494.84	19													
0290		Ļ													
OT 0		- 19.66	<u> </u>						-						
		-													

						/ر	2/08			EXPLO	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	2/90								SHEET 3 OF 3
				El	ND DATE	9/、	0/90		vtonoio	n Droiad			STATION	127+00 "P	
				JC	DB DESCRI	PTION	00C-I		xtensio	n Projec	л		OFFSET	<u>27.79 RT</u>	
	204			LC	OCATION			Jounty, Nev	ada				ENGINEER		
	2Mm			BC	ORING	12	7+00	-	r			]		Peterson	
	- A			E.	A. #		79-01-5	<u>,</u>					DRILLING		
	V			GI	ROUND EL	EV15	13.84 (	m)	— t	9/3/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	TEM _	lope - Cathe	ead				BACKFILLED	Yes DA	ATE 9/3/1998
	ELEV.	DEPTH	SAI		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	ESCRIPTION		REMARKS
	(m)	(m)	110.		Increments	<u>300 mm</u>	Recov'd		Cicup						
		_	0												
		_													
	1492.84 -	-21													
		21.34								21.34					
		_													
		-													
	1491.84 -	-22													
		_													
		_													
		-													
	1490.84 -	-23													
		_													
		-													
	1489.84 -	-24													
		_													
		_													
		-													
	1488.84 -	25													
		_													
		-													
		-													
	1487.84 -	26													
		_													
		-													
	1486.84 -	-27													
-		_													
5/11/0		-													
DT 5	1485.84 -	28													
OT.G															
ĺ ≥		-													
4 L H		+													
15D.G	1484.84 -	-29													
10670															
DT 0		-													
		-													
<u> </u>			<i>i</i>												

							. a/	2/98			EXPLORATION LOG	
					ST		= Q/	2/98			100.0	SHEET 1 OF 2
					E١			1-20	Freeway E	vteneio	n Project STATION 129+0	1 "P"
					JC	B DESCRI	PTION	1-500		xtensic	OFFSET <u>12.82</u>	
	201				LC	OCATION			Jounity, Nev	aua	ENGINEER MG	
	2Mm	e e	5		BC	ORING		<u>9+00</u>		(		:0n
	Ĩ,		<1		Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL OPERATOR TOUC	
	ž.	~			GI	ROUND EL	EV15	606.20 (	m)		9/2/98 NF HQ CO	ore
			1)	1	HA	AMMER DR	OP SYS	STEMR	Rope - Cathe	ead	BACKFILLED Yes	DATE
			отц	SAI	MPLE	BLOW CO	DUNT			11909		
	(m)		(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DESCRIPTION	REMARKS
		F	0.00								Slightly moist, very stiff, reddish brown Sandy	Placed 1.2
		-		A					w, PI, Sv	СН		casing.
		-	0.61								0.61 Hard fractured dark grey, slightly weathered	
		F									Basalt Bedrock.	
	1505.20 -	+1									Fractures at 15 - 25 degrees and 65 degrees	
		-		В							near 1.5 meters with 1 cm. day mining.	
			1.83									
	1504.20 -	<u>+</u> 2										
		F									Highly fractured with clay infilling with main	
		-									fracture at 70 degrees.	
		F		С								
	4500.00	F.									3.05	
	1503.20 -	_3									Moderately hard to soft, highly fractured,	
		_	3.35							-	reddish grey <b>Basalt Bedrock</b> with zones of	
		F										
		F									Completely weathered to alay below 2.8 mete	<b>r</b> 0
	1502.20 -	+4		П							Completely weathered to clay below 3.8 mete	15.
		-										
		F										
			4 88									
	1501.20 -	-5								-		
		F									5.18 Soft red to tan, completely decomposed	
		+									Granitic Bedrock.	
		-		Е								
	4500.00	F a										
	1500.20 -	6										
			6.40							4		
		F										
		-										
	1499.20 -	+7		_								
		F		F								
		F										
101			_									
5/11	1498 20 -	8	7.92							-		
GDT		Ļ										
)OT.(		_										
NV_L		╞		G								
1 L H		F		9								
5D.G	1497.20 -	+9										
7901.		F	9 <i>1</i> 5									
T 00.		-	J.+J	<u> </u>						1	Remnant fractures abundant at 60-65 degrees	S.
DO		L										
N												

[						/۵	2/08			EXPL	ORATIC	N LOG			
				ST	FART DATE	<u> </u>	2/90								SHEET 2 OF 2
				El	ND DATE	9/1	2/90	 			-4		STATION	129+01 "P	
				JC	DB DESCRI	PTION	1-000		xtensio	n Projec	1		OFFSET	12.82 LT	
	24	~		LC	DCATION			Jounty, Nev	ada				ENGINEER	Acker	
	1 Mart			BC	ORING		9+00	-	[				EQUIPMENT	Peterson	
	Ą			E.	A. #		79-01-5	<u>,</u>					DRILLING		
	le			GI	ROUND EL	EV15	06.20 (	m)	— E	9/2/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM _R	cope - Cathe	ead				BACKFILLED	Yes DA	TE 9/2/1998
Ī	ELEV.	DEPTH	SAI NO.	MPLE TYPE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	FERIAL DE	SCRIPTION		REMARKS
	(11)				Increments	<u>300 mm</u>	Recova								
		_	н												
		_													
		10.97													
	1495.20	-11													
		_													
		-													
		-													
	1494.20 ·	-12													
		- 12.50													
		-													
		-													
	1493.20														
		_	J												
		-													
	4 400 00	14.02													
	1492.20	- 14 -							-						
		-													
		-													
	1/101 20 -	- 15	к												
	1431.20	-													
		15.54								15.54					
		-													
	1490.20 -														
	1400.20	-													
		-													
		-													
	1489.20	- 17													
		-													
		-													
/01		-													
5/11	1488.20														
GDT		-													
DOT		-													
N		Ē													
CGPJ	1487.20 ·	- 19													
<del>3</del> 015E		-													
3200		+													
DOT		L													
Ž															

						2/	21/00			EXPLORATION LOG			
				S	TART DATE	: <u> </u>	24/00						SHEET 1 OF 1
				EI	ND DATE	3/	24/00	Eroowey F	vtona	n Project	STATION	<u>130+01 "P"</u>	
				JC	OB DESCRI	PTION	1-580		xtensi	on Project	OFFSET	0.38 RT	
				LC	OCATION		ashoe	County, Nev	/ada		ENGINEER		
	1 MM			B	ORING	13	30+00				EQUIPMENT	JD 792	
	I.			E.	.A. #	00	079-01-	5		GROUNDWATER LEVEL	OPERATOR		
	n de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía de la compañía			G	ROUND EL	EV14	199.58 (	(m)		DATE DEPTH m ELEV. m	METHOD	Trackhoe	
				H.	AMMER DR	OP SYS	STEM	NA			BACKFILLED	Yes DAT	E3/24/2000
	FLEV	DEPTH	SA	MPLE	BLOW CO		Doroont		USCS		CONTION		DEMARKS
	(m)	(m)	NO	. TYPE	Increments	300 mm	Recov'd	LABTESTS	Group	Moist von danse ro	brown Silty	Navov	REWARNS
		-							SC	Sand with estimated 3	30% low plastic	fines,	
		-							SM	60% fine to coarse sa	nd, 10% fine to	coarse	
		-								Moist, very dense, rec	d-brown to brow	n, <b>Well</b>	
	1498 58	0.9 1	1						GW	Graded Gravel with S	ilt and Sand wi	th 11%	
	1400.00	1.2	2 A	GRAE	3			MC, SA, PI	GM	fine to coarse gravel.		Sanu, 5576	
		_								1.52			
		-								Moist, very dense, bro	own, Silty Sand	with	
		-								Gravel with 26% low	plastic fines, 45	% fine to	
	1497.58	-2							SM	approximately 30% si	nall to medium	cobbles.	
		- 24	4										
		2.5	9 B	GRAE	3			MC, SA, PI,		2.59			
	1496.58	-3											
		-								Excavator refusal at 2	.6 meters (Very	/ hard,	
		-								volcanic bedrock).	ered, untracture	ea,	
		-								,			
		-											
	1495.58	-4											
		-											
		L											
	1494.58	-5											
		-											
		-											
		-											
	1 400 50												
	1493.58	6											
		L											
		-											
	1492.58	-7											
		-											
		-											
/01		-											
5/11.	1/01 59	L,											
3DT	1431.00	ľ											
OT.0		-											
		F											
2 C		-											
SD.G	1490.58	-9											
9015		-											
001		F											
DOT													
NV		_											

END DATE       9/1/39       SHEET 1 OF         NOT DESCRETION       13/0-75       STATION       13/0-75         BORING       13/0-75       COUND.ELEV.       13/0-75         GROUNDNELEV.       14/0-75       COUND.ELEV.       14/0-75         Image: State 10 of 1000       1000-01-5       COUND.ELEV.       1000-01-5         Image: State 10 of 1000-01-5       Cound 1000-01-7       Cound 1000-01-7       1000-01-7         Image: State 10 of 1000-01-7       Image: State 10 of 1000-01-7       Cound 1000-01-7       Cound 1000-01-7         Image: State 10 of 1000-01-7       Image: State 10 of 1000-01-7       Cound 1000-01-7       Cound 1000-01-7         Image: State 10 of 1000-01-7       Image: State 10 of 1000-01-7       Cound 1000-01-7       Cound 1000-01-7         Ima							Q/	1/98			EXPLORATION LOG	
END MAI       Lind       Status       Status       Status         Job IDSENTROM       1-580 Preeway Extension Project       OFFER       132.3 LT       Incluster         Job IDSENTROM       1-580 Preeway Extension Project       OFFER       132.3 LT       Incluster         CACATION       Washoe County, Nevada       OUTPOILS       OutProvide       OFFER       Incluster       Adder         E.A.       0079-01-5       County, Nevada       OPERATOR       Petersion       OPERATOR       Petersion       OPERATOR       Petersion       Description       Incluster       Petersion       Description       Incluster       Petersion       Description       Incluster       Description       Research         Integration       Integration       Integration       Integration       Integration       Description       Integration       Description       Integration       Integratin       Integratin       Integra					S		= <u>-</u> 9/ 0/	1/98				SHEET 1 OF 2
Location       Vision       Construction					El	ND DATE		1/30		vtencio	STATION <u>130+53 "P"</u>	
EXAMPLE       LOCATION       Visibility       Control       EXAMPLE       Location         BORNAGE       E.A. #       0079-01-5       GROUNDWATER LEVEL       OPERATOR       Peterson         BARNAGE       EXAMPLE       1490-27       -       Barnage       Barnage       Barnage       Barnage       Barnage       Peterson					JC	DB DESCRI	PTION	ashoo (		vada	OFFSET MG	
BORING       1.39773       Composition       Build and service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the service of the		- Am			LC	DCATION			Journy, Nev	aua	ENGINEER Acker	
EA.8       Current iso       Duration of the current iso       Duration of the current iso       Hard core         CRUND ELEV. 1499.27 (m) HAMMER DROP SYSTEM       Rope - Cathedd       Date: Depth iso       Hard core       Hard core         EEV.       Depth iso       No. TYPE iso       Cathedd       Matter iso       Hard core         EEV.       Depth iso       No. TYPE iso       Cathedd       Matter iso       Hard core         Iso       Depth iso       No. TYPE iso       Cathedd       Matter iso       Matter iso         Iso       Depth iso       No. TYPE iso       Cathedd       Matter iso       Matter iso         Iso       Depth iso       No. TYPE iso       Cathedd       Matter iso       Matter iso         Iso       Depth iso       No. TYPE iso       Cathedd       Signty most, very stift, rediation brown sandy       Cathedd         Iso       Depth iso       Depth iso       Depth iso       Depth iso       Depth iso       Depth iso         Iso       Depth iso       Depth iso       Depth iso       Depth iso       Depth iso       Depth iso         Iso       Depth iso       Depth iso       Depth iso       Depth iso       Dept		ž.			BC	DRING		0710 170 01 1	5	[		
BROWNE EEV. 1992 / 1000       METHOD		4			E.	A. #		1 3-01-0 100 77 /	, m)		DATE DEPTH m ELEV. m DRILLING	
BLD:       Definition       MAMER DROP system, Ruper counted       Matter Ruper counted       Matter Ruper counted       Matter Ruper counted       Matter Ruper counted       Matter Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       Ruper counted       <		l le			GI	ROUND ELI	EV	199.27 (	nn) Rona Cath		9/1/98 NE METHOD Yos	0/1/1008
IERV       Deprint       EMARKE       BLOW COUNT       Process to market       MATERIAL DESCRIPTION       REMARKS         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0<					H	AMMER DR	OP SYS				BACKFILLED DAT	E
1482.7     -1     -0.00     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -0.01     -		ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
1493.27   A   w. PI, Sv   CL   0.91     1493.27   B   0.91   Hard, fractured to highly fractured, red brown to grey, externely, westhered, Basalt Bedrock, Cale, infilling in fractures.     1497.27   -2   C   Hard, fractured to highly fractured, red brown to grey, externely, westhered, Basalt Bedrock, Cale, infilling in fractures.     1497.27   -2   C   Hard, fractured to highly fractured, red brown to grey infilling in fractures.     1497.27   -2   C   Harder formation with clay infilling in fractures.     1495.27   -4   -4.27   Harder formation with clay infilling in fractures.     1495.27   -5   E			0.00								Slightly moist, very stiff, reddish brown Sandy Clav.	
148227     0.91     .0.91       148227     1     B       1487.27     2			-	А					w, PI, Sv	CL		
1498.27   0.91   0.91   0.91     1498.27   1.92   1.92   1.92     1497.27   -2   -2   -2     1497.27   -2   -2   -2     1497.27   -2   -2   -2     1497.27   -2   -2   -2     1497.27   -2   -2   -2     1497.27   -2   -2   -2     1497.27   -2   -2   -2     -4   -4.27   -4     -4.57   -4.57   -4.57     -4.57   -5   -6     -7   -7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7     -7.7   -7.7 <tr< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>			-									
1487.27     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2     -2		1498.27 ·	0.91								0.91 Hard, fractured to highly fractured, red brown	
1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1432     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     1433     11433     11433     11433     11433     11433     11433     11433     11433     11433     11433     11433     11433     11433     11433     1			-	в							to grey, extremely weathered to weathered	
1497.27     -2     C     Harder formation with clay infilling in fractures.       1497.27     -2     C     Harder formation with clay infilling in fractures.       1496.27     -4     D     Harder formation with clay infilling in fractures.       1496.27     -4     D     Harder formation with clay infilling in fractures.       1496.27     -4     D     Harder formation with clay infilling in fractures.       1496.27     -5     E     Harder formation with clay infilling in fractures.       1490.27     -5     E     Harder formation with clay infilling in fractures.       1490.27     -6     -     -       1490.27     -7     -     -       1490.27     -7     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -       1490.27     -9     -     -			- 1.52								common throughout unit.	
1407.27     -2     C     C     Harder formation with clay infilling in fractures.       1406.27     -4     -4     -4     -4     -4       1405.27     -4     -4     -4     -4     -4       1405.27     -4     -4     -4     -4     -4       1405.27     -4     -4     -4     -4     -4       1405.27     -5     -6     -4     -4     -4       1404.27     -5     -6     -4     -4     -4       1404.27     -6     -6     -4     -4     -4       1404.27     -7     -6     -4     -4     -4       1404.27     -7     -6     -4     -4     -4       1404.27     -7     -7     -4     -4     -4     -4       1404.27     -7     -7     -4     -4     -4     -4     -4     -4       1404.27     -7     -7     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -			-								_	
1496.27     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4		1497.27 ·	<b>_</b> 2									
1496.27     -3.3.05     Harder formation with clay infilling in fractures.       1496.27     -4.27     -4.27       1495.27     -4.47     -4.27       1494.27     -5.5     E       1494.27     -6.			-	C								
1496 27			-								Harder formation with clay infilling in fractures.	
1496.27     -3.308     -4       1496.27     -4     -4       1496.27     -4     -4       1494.27     -5     E       1494.27     -5     E       1494.27     -6     -6       1493.27     -6     -6       1493.27     -6     -6       1493.27     -6     -6       1493.27     -6     -6       1493.27     -6     -6       1493.27     -6     -6       1493.27     -7     -7       -8.84     -9     -9       -8.84     -9.14     Wet, soft, red, completely weathered, altered Volcaniclastic Sandstone. Weathered to Clayey Sand and Sundy Clay with some completent gravel and sand.			-									
1495.27     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4     -4		1496 27	3 3.05									
1495.27     -4     -4.27       -4.27     -4.27       -4.37     -4.37       -4.37     -4.37       -4.37     -5       -4.37     -5       -5.79     -6       -5.79     -7       -7     -7.32       -7.32     -7.32       -8.84     -7.32       -9     -9.14       Wet, soft, red, completely weathered, altered Volcaniciatis Sandyclaw with some completely weathered to Clawide Sandyclaw with some completely with some completely with some completely and sand.		1430.27	-									
1495.27     -4     D     -4     -4       1494.27     -4     -4     -4     -4       1494.27     -5     E     -     -       1494.27     -5     E     -     -       1493.27     -6     -     -     -       1492.27     -7     -     -     -       1492.27     -7     -     -     -       1492.27     -7     -     -     -       1492.27     -7     -     -     -       1492.27     -7     -     -     -       1490.27     -8     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -			-									
1495.27     -4     D       1495.27     -4     -4.27       4.57     -     -       1494.27     -5     E       1493.27     -6     -       1493.27     -6     -       1493.27     -7     -       7.32     -     -       1491.27     -8     G       1492.27     -7     -       7.32     -     -       1490.27     -9     -       8.84     -     -       1490.27     -9     -       440.27     -9     -       8.84     -     -       1490.27     -9     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -			-	_								
1491.27     -     4.27       1492.27     -     -       5.79     -     -       1492.27     -     -       7     -     -       1492.27     -     -       7     -     -       1492.27     -     -       7     -     -       1492.27     -     -       7     -     -       1492.27     -     -       8.84     -     -       1490.27     -     -       9     -     -       -     -     -       1490.27     -     -       9     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -		1/05 27	-	D								
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1494.27     -5     E     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -<			4 57	,								
1494.27     -5     E			-	1						1		
1493.27     -6       1493.27     -6       -     -       1492.27     -7       -     -       1492.27     -7       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -		1494 27 •	-5	F								
1493.27   -6     1493.27   -6     1492.27   -7     -7   -7     -7,32     -8   -6     -8.84     1490.27     -9     -4     -4     -5,79     -7     -7     -7     -7     -7     -8.84     -9     -9     -9     -9     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1     -1		1 10 1.21	Ļ									
1493.27   -6   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   <			F									
1493.27   -6   F     1492.27   -7     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32     -7,32<			5.79	)								
1491.27   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   - <t< td=""><td></td><td>1493 27</td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></t<>		1493 27	6							1		
1492.27   -7   -7   -7     1491.27   -8   -8   -8     1491.27   -8   -8   -8     1491.27   -8   -8   -8     1491.27   -8   -8   -8     1491.27   -8   -8   -8     1490.27   -9   -9   -9     1490.27   -9   -9   -9     -1   -4   -4   -4		1733.21	-									
1492.27   -7     1492.27   -7     1491.27   -8     G			-	-								
1492.27   -7     1492.27   -7     1491.27   -8     6   -4     1490.27   -9     1490.27   -9     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4			-	F								
1491.27   -   7.32   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -		1402 27	<b>7</b>									
1491.27   -8   G   Highly fractured with red brown clay infilling.     1490.27   -9   9.14     1490.27   -9   9.14     Wet, soft, red, completely weathered, altered Volcaniclastic Sandstone. Weathered to Clayey Sand and Sandy Clay with some competent gravel and sand.		1732.21	- 732	,								
Note   Note   Note     1491.27   -8   G     1490.27   -9     1490.27   -9     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4   -4     -4<			- 1.32							4		
1491.27     -8     G     Highly fractured with red brown clay infilling.       1490.27     -9     9.14       1490.27     -9     9.14       Wet, soft, red, completely weathered, altered Volcaniclastic Sandstone. Weathered to Clayey Sand and Sandy Clay with some completent gravel and sand.	01		_									
Highly fractured with red brown clay infilling. Highly fractured with red brown clay infilling. Highly fractured with red brown clay infilling. 9.14 9.14 Volcaniclastic Sandstone. Weathered, altered Volcaniclastic Sandstone. Weathered to Clayey Sand and Sandy Clay with some competent gravel and sand.	5/11/-	1404.07	<b>L</b> .								Liberta, for string of with an et have a law in Citie	
1490.27   9   9   9.14     1490.27   9   0.14	3DT	1491.27	- 8 -	G							Hignly fractured with red brown clay infilling.	
1490.27   -   8.84   9.14     1490.27   -   9   9.14     Wet, soft, red, completely weathered, altered Volcaniclastic Sandstone. Weathered to Clayey Sand and Sandy Clay with some competent gravel and sand.	D.T.C		-									
Program   8.84   9     1490.27   9   9     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     -   -     - <td>N</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	N		-									
Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image: 1490.27     -9       Image	GPJ	4 400 07	8.84	•						-		
H   H   H   Volcaniclastic Sandstone. Weathered to     Clayey Sand and Sandy Clay with some competent gravel and sand.	15D.	1490.27	-9								9.14	
H   H   Clayey Sand and Sandy Clay with some competent gravel and sand.	06700		-								Volcaniclastic Sandstone. Weathered to	
	ÓT 0		F	н							Clayey Sand and Sandy Clay with some competent gravel and sand	
			-									

						0/	1/02			EXPLORATION LOG			
				S	TART DATE	<u> </u>	1/90						SHEET 2 OF 2
				EI	ND DATE	9/	1/98			n Drain at	STATION	130+53 "P	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET	<u>13.23 LT</u>	
	.tw			LC	OCATION		ashoe (	County, Nev	ada		ENGINEER	MG	
	W	6		B	ORING	13	80+75		r		EQUIPMENT	Acker Deterson	
	Ž			E.	A. #	00	)79-01-5	5		GROUNDWATER LEVEL	OPERATOR	1 6(613011	
	2 c			G	ROUND EL	EV14	99.27 (	m)	ŀ	9/1/98 NF	METHOD	HQ Core	
			1	H	AMMER DR	OP SYS	STEMR	lope - Cathe	ead		BACKFILLED	_YesDA	ATE9/1/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		40.00								40.00			
		10.36								Soft, red to light grey,	slightly fracture	ed,	
		-								completely weathered	Granitic Bedr	ock.	
	1488 27 -	- 11											
	1100.27		Т										
		-											
		-											
	1 407 07	- 11.89							-				
	1467.27 -	12											
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		13.41							-				
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	1485.27 -	- 14	ĸ										
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		14.94											
	1484.27 -	- 15											
		_											
		-	L										
	1483.27 -	- 16											
		16.46											
		- 10.40							1				
		_											
	1482.27 -	-17											
		F	N.4										
		_	IVI										
1/01		_											
T 5/1	1481.27 -	-18											
T.GD.		- 18.29								18.29			
DO		-											
NN r		[											
D.GP.	1480.27 -	- 19											
9015L		-											
3007		-											
DOT		Ĺ											
N													

						R/	31/98			EXPLO	RATION	N LOG			
				S		= <u>0/-</u> a/	1/98							400.00 "	SHEET 1 OF 2
				E	ND DATE	<u> </u>	1,30	Freeway F	vtonei	n Proiect			STATION	132+03 "	•··
				JC	DB DESCRI	PTION			vodo				OFFSET	MG	
	24			LC	OCATION	10		Sourity, Nev	aua				ENGINEER	Acker	
	N N			B	ORING		2+00							Peterson	
	1			E.	.A. #		01 40 /	) m)			DVVATER	ELEVEL FLEV.m	DRILLING		
	Ve			G	ROUND EL	EV14	191.10 ( F	(II) Dama Cath		9/1/98	NE		METHOD		0/4/4000
				H	AMMER DR	OP SYS	STEM _	kope - Cath	ead				BACKFILLED	Yes D	ATE 9/1/1998
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		МАТЕ	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	0		Increments	300 mm	Recov'd		Gioup		Hard, sligh	ntly fracture	ed to highly fract	ured	
		0.0								c	lark grey	to grey Bas	salt Bedrock.	ur o'u,	
		_	A												
	1490.18 -	-1													
		-													
		1.5	2						-						0.21.00/0.1.00
		Ļ													0-01-90/9-1-98
	1489.18 -	-2													
		-	в												
		-								0	Clay seam	n 0.3 meter	s thick.		
		[									-				
	1488.18 -	_3 3.0	5						4						
		-													
		-													
			С												
	1487.18 -	-4													
		-													
		4.5	7												
	1486.18 -	-5								F	Highly frac	ctured.			
		-													
		-													
	1485.18 -	6 6.1	0												
		-							]						
		-	E												
		6.8	6								- Highly frac	ctured with	clay infilling to ?	1.5 cm	
	1484.18 -	-7							1	'	5, 1.00		,		
		-	F												
		- 76	2												
1/01									1						
T 5/1	1483.18 -	-8													
-GDT		_													
DOD		-	G												
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J.GP,	1482.18 -	9 .4	4												
9015L		9.1	-						1	F	-lighly frac	ctured with	very little clay ir	nfilling.	
3200		-												-	
DOT		Ľ													
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						Q /*	21/02			EXPL	ORATIO	N LOG			
				ST	ART DATE	<u> </u>	1/90								SHEET 2 OF 2
				E١	ND DATE	9/	1/98	 		n Draia	-4		STATION	132+03 "F	D"
				JC	B DESCRI	PTION	1-580	Freeway E	xtensio	n Projec	21		OFFSET	10.61 LT	
	24			LC	OCATION		asnoe (	Jounty, Nev	ada				ENGINEER	Ackor	
	2Wm	C A		BC	ORING	13	32+00		r				EQUIPMENT	Peterson	
	The second second second second second second second second second second second second second second second se			Ε.	A. #		079-01-5	<u>,</u>							
	Ľ			GI	ROUND EL	EV14	91.18 (	m)	— - t	9/1/98	NE		METHOD	HQ Core	
				HA	AMMER DR	OP SYS	STEM _	cope - Cathe	ead				BACKFILLED	Yes D	ATE 9/1/1998
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
							110001 4								
		_													
		- 10.67							-						
	4 400 40	-													
	1480.18	11													
		_	1												
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	4 470 40	-													
	14/9.18	12								12.19					
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	1478.18	13													
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		-													
		-													
	1476.18	15													
		_													
		-													
		-													
	1475.18	<u>+</u> 16													
		_													
		-													
		-													
	1474.18	<u>+</u> 17													
		_													
1		-													
5/11/0		-													
DT 5	1473.18	<u>+</u> 18													
OT.G		-													
		-													
1 L L		-													
15D.C	1472.18	19													
0620		[													
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N_D		-													

						. 8/'	31/98			EXPLORATION LOG			
				S	FART DATE	<u> </u>	21/00						SHEET 1 OF 2
				E	ND DATE	0/、	1 500	 Ereewov E	vtonoic	n Drojoot	STATION	133+65 "P	
				JC	DB DESCRI	PTION	1-000		xtensic		OFFSET		
	- Ann			LC	OCATION			Jounty, Nev	aua		ENGINEER		
	2 Mart			BC	ORING		3+50	-	[			Peterson	
	The second second second second second second second second second second second second second second second se			E.	A. #		79-01-5	) \			DRILLING		
	te			GI	ROUND EL	EV14	78.81 (	m)	<u> </u>	8/31/98 NE	METHOD	Auger / HC	
			1	HA	AMMER DR	OP SYS	STEM _R	lope - Cathe	ead		BACKFILLED	_YesDA	ATE 8/31/1998
	ELEV.	DEPTH	SA		BLOW CO 150 mm	DUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)			Increments	<u>300 mm</u>	Recov'd		Cicup	Hard, Sandy Lean Cl	ay with Gravel	and	
		-								CODDIES.			
		-											
		+											
	1477.81	<u>+</u> 1											
		-											
		-							CL				
	1476.81	-2											
		-											
		-											
	1475.81	-3											
		-								3.66			
		-								Highly weathered, highly weathered, highly weathered, highly altered to orange	hly fractured, h -brown <b>Volcan</b> i	ighly	
	1474.81	-4								Fractures contain sar	idy clay filling.	Scattered	
										silica and calcite fract Poor core recovery in	ure filling with s sections.	andy clay.	
		-											
		-											
	1473.81	-5											
		-											
		-											
	1472.81	-6											
		_											
		-											
	1471.81	+7											
_		_											
/11/0		-											
<b>JT</b> 5,	1470.81	+8											
DT.GI													
Z_DC		Ļ											
PJ N		-											
5D.G	1469.81	-9											
7901													
<u>Т</u> 00		-								0.75			
V_DC		-								Highly weathered. wh	ite Decompose	d	
z		1	1	1			1	1			•		

						Q/'	21/09			EXPLORATION LOG			
				ST	ART DATE	0/	21/90						SHEET 2 OF 2
				E١	ND DATE	8/、	31/98			n Dusis st	STATION	133+65 "P	
				JC	B DESCRI	PTION	1-580	Freeway E		n Project	OFFSET	5.74 RT	
	. Day			LC	OCATION		ashoe (	County, Nev	vada		ENGINEER	MG/SDB	
	2MM	6		BC	DRING	13	3+50				EQUIPMENT	Peterson	
	Ĩ,			Ε.	A. #	00	79-01-5	5		GROUNDWATER LEVEL		1 6(613011	
	n de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la company Na companya de la comp			GI	ROUND EL	EV14	78.81 (	m)		8/31/98 NE	METHOD	Auger / HC	Q Core
			1	HA	AMMER DR	OP SYS	TEM R	lope - Cathe	ead		BACKFILLED	_YesDA	ATE 8/31/1998
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	(m) 1467.81 - 1466.81 -	(m) - - - - - - - - - - - - -		ITPE	Increments	<u>300 mm</u>	Recov'd			Granite. Original rock feldspars very highly original rock preserve staining. Slight FeOx staining.	k structure intac weathered. No d. Moderate Fe	t, but jointing of eOx	
	1464.81	- - 											
	1463.81 · 1462.81 ·	- 15 - - - - - - - - - - - - - - - - - - -											
10	1461.81	- - - - - -											
NV_DOT.GDT 5/11/C	1460.81	- 											
NV_DOT 0079015D.GPJ	1459.81	- 											

							Q /*	31/00			EXPLORATION L	.OG			
					S	FART DATE	 	31/00						404	SHEET 1 OF 1
					El	ND DATE	_8/-	01/99		vtonali	n Drojact		STATION	134+82 "P	
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Project		OFFSET	<u>11.51 LI</u>	
	. here				LC	OCATION		ashoe (	County, Ne	ada			ENGINEER	Acker	
	1 Mm	E I	5		B	ORING	13	84+79					EQUIPMENT	Peterson	
	Ä		51		E.	A. #	00	079-01-5	5		GROUNDWATER LE	VEL	OPERATOR	1 6(613011	
	n de	1			G	ROUND EL	EV14	60.60 (	m)		DATE DEPTH m EL 8/31/99 NF	EV. m	METHOD	HQ Core	
					H	AMMER DR	OP SYS	STEM_R	Rope - Cath	ead			BACKFILLED	_YesDA	TE 8/31/1999
				SAI	MPLE	BLOW C	OUNT	_		11606					
	ELEV. (m)	DEI (r	m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERI	IAL DE	SCRIPTION		REMARKS
		_									Moist, very de	ense, bro	wn Clayey Sar	d with	
		-									sand, 15% fin	ne to me	dium gravel. Su	rface	
		-									cobbles and b	boulders			
		-													
	1459.60	1								SC					
		Ļ	1 5 2												
		-	1.52			17				-					
		-	1 98	A	SPT	28 25	53		w, PI, Sv		1 98				
	1458.60	-2	1.00			20					Soft, complete	ely weat	hered, hydrothe	ermally	
			2.44								altered, tan to	o red <b>Gra</b>	nitic Bedrock.	Clayey	
				_		12			51.0	1	fines.	choy with	1 20 00 /0 mgm		
		-	2.90	в	SPI	13	33		w, PI, Sv						
	1457.60	-3													
		-													
		F													
	1456.60	-4	3.96			12				-					
		-		С	SPT	20	43		w, PI, Sv						
			4.42			23				-					
		-													
	1455 60	5													
	1400.00														
		-	5.49												
		-		П	SPT	11	41								
		-	5.94	0		22									
	1454.60	6													
		-													
		-									Slightly hard a consistency.	and tan y	ellow with a sil	ty sand	
		-	7 01												
	1453.60	-7	7.16	Е	SPT	50/127	50/127			-					
		Ľ													
11/01		F													
T 5/;	1452.60	+8													
T.GD		-													
DO		<u> </u>	8.53		0.07	E0/400	50/400			4			•		
N I		E	8.69	F	SPT	50/102	50/102				8.69 Temp. = 22 de	leg. Cels	IUS		
J.GP.	1451.60	<u>–</u> 9													
1015E		F													
0079		F													
DOT		F													
NV_L															

						8/	30/08			EXPLORATION LOG				
				S	TART DATE	<u> </u>	30/90						SHEET 1 OF 1	
				EI	ND DATE	0/	1 590	Erooway E	vtonci	n Project	STATION	134+99	"P"	
				JC	OB DESCRI	PTION					OFFSET	11.05 L		
	- Ann			LC	OCATION			Journy, Nev	aua		ENGINEER			
	2 Mr.			B	ORING		30+00	_				Peterso	 n	
	Ą			E.	.A. #		079-01-	<b>D</b>		GROUNDWATER LEVEL			· · · · · · · · · · · · · · · · · · ·	
	Ž.			G	ROUND EL	EV14	58.45 (	m)		8/30/98 NE	METHOD	Auger		
				H.	AMMER DR	OP SYS	STEMF	Rope - Cath	ead		BACKFILLED	Yes	DATE <u>8/30/1998</u>	
	ELEV. (m)	DEPTH (m)	I SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS	
		0.0	0 A	SPT	7 18 35	53		w, PI, Sv		Dry to slightly moist, Clayey Sand with est plastic fines, 60% year	very dense, dar imated 40% me ry fine to coarse	k brown dium sand	Bulk sample taken from 0-1.5	
		-	-						SC			sana.	motors.	
		-												
	1457.45 -	+1								1.07 Maiat danga light va	llowich brown t	voriable	_	
		È								colored, completely c	lecomposed, ali	ered		
		- 1.5	2		7				-	Granitic Bedrock. Lo alteration to high plas	calized zones o stic clavey sand	of		
		- 10	В	SPT	14	26		w, PI, Sv			no olayoy baria	•		
	1456.45 -	-2	8		12				-					
		-												
		-												
	1455.45 -	<b>3</b> 3.0	5		0				4					
		-	С	SPT	16	42		w, PI, Sv		Partially altered to cla	ay with pinkish r	ed color.		
		- 3.5	1		26				-					
	1454.45 -	-4												
		-												
		4.5	7											
			П	SPT	9	/18		W PL SV		Whitish yellow and sl	ightly less altered	ed.		
	1453.45 -	<b>5</b> 5.0	3		28			w, i i, ov						
		-												
		-												
		-												
	1452.45 -	6 6 1	0											
		-			6				1	Whitish pink to yellow	v and highly alte	ered.		
		6.5	5 E	SPT	12	24		w, PI, Sv						
		-							1					
	1451 45 -	<b>7</b>												
	1401.40	'												
		-												
01		7.6	2		18				-					
5/11/	4 450 45	-	F	SPT	31	57		w, PI, Sv		0.00				
DT	1450.45	- 8 8.0	0	+	20					ð.Uð			-	
OT.C		F												
NV		-												
I L L L		F												
15D.C	1449.45 -	-9												
10670		[												
)T 0(		F												
		-												
ź		1			1	1	1		1					
							/ g	30/00			EXPLORATION LOG			
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					S	TART DATE	 	1/00					105 06 " <b>T</b> "	SHEET 1 OF 2
					El	ND DATE	9/	1/33	Freewoy F	vtona	n Project	STATION	135+20 "P"	
					JC	DB DESCRI	PTION	00C-I		xtensi		OFFSET	8.82 RT	
	200				LC	OCATION		asnoe (	Jounity, INE	aua		ENGINEER		
	2MM				B	ORING	13	35+20				EQUIPMENT	Peterson	
	Ĩ,		/		E.	A. #	00	079-01-5	5		GROUNDWATER LEVEL		1 6(613011	
	ž				G	ROUND EL	EV. <u>1</u> 4	155.90 (	m)		DATE DEPTH ELEV. m 9/1/99 NF	METHOD	HQ Core	
			7)		H	AMMER DR	OP SYS	STEM _R	Rope - Cath	ead		BACKFILLED	Yes DATI	9/2/1999
		DED		SAN	MPLE	BLOW C	OUNT			11000				
	ELEV. (m)	(m)	іп )	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
	1454.90 -	- - - -									Soft, completely weat altered, tan brown to Granitic Bedrock. Hig consistency of clayey 35-55% high plastic fi	hered, hydrothe whitish purple a ghly variable wit sand and sand nes. Thin cobbl	ermally nd red h a y clay with ey topsoil.	
		-												
	1452.00	- 1 - -	.52	A					w, Pl, Sv		Consistency of sandy	gravelly clay.		
	1455.90	<b>[</b> 2												
		_ 2	2.44											
		-		в	SPT	7	23				Consistency of clayey	sand with sulfa	ate	
		- 2	2.90	_		15					Temp. = 27 deg. Cels	ius		
	1452.90	-3 3	3.05	С					w, PI, Sv	-				
		-												
		3	3.96											
	1451.90	<b>4</b>		П	SPT	15	64							
		4	1.42	D	SFT	39	04							
		_									Soft to slightly hard w	ith nurnle and r	ed color	
		-									Temp. = 27 deg. Cels	ius		
	1450.90	-5												
		-												
		- 5	o.49	_	ODT	21	50/70			-				
		5	5.79	E	SPI	50/76	50/76		W, PI, SV	-				
	1449.90	-6												
		-												
		-												
		Ľ												
	1448 90 -	7	7.01											
	10.00	+ · -	Ī	F	SPT	10	38				Soft with whitish purp	le color and a c	onsistency	
		- 7	7.47			23						Sana/Sanay Uld	y.	
5		-												
5/11/(		F _												
Ц	1447.90	-8												
OT.G		Ĺ.												
⊡ ≥		8	5.53			12				-	Whitish grev with zon	es of red and a	high	
L L		-	0.00	G	SPT	10	25		w, PI, Sv		plastic clayey sand co	onsistency.	5	
5D.G	1446.90	<del>-9 8</del>	9.99			15				1	remp. = 36 deg. Cels	ius		
79015		-												
00 1		Ľ												
Ö		L												
≥́														

						o /	30/00			EXPL	ORATIO	N LOG			
				S	TART DATE	= _8/	1/00								SHEET 2 OF 2
				El	ND DATE	9/	1/99	<b>_</b>		- D '	-4		STATION	135+20 "P"	
				JC	OB DESCR	IPTION	1-580	Freeway E	xtensic	on Projec	ct		OFFSET	8.82 RT	
				LC	OCATION	W	ashoe (	County, Nev	vada				ENGINEER	MG	
	W	6		B	ORING	13	85+20		(				EQUIPMENT	Acker Peterson	
	A.			E.	.A. #	00	)79-01-5	5		GROU	NDWATER		OPERATOR	- Feleison	
	and a			G	ROUND EL	EV14	55.90 (	m)		DATE 9/1/99	DEPTH m	ELEV. m	METHOD	HQ Core	
								Rope - Cathe	ead	0, 1,00			BACKFILLED	_YesDA	TE 9/2/1999
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm	Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		10.06	н	SPT	12	36									
		- 10.52			22				_						
		_													
	1444.90	<b>—</b> 11													
		_													
		11.58													
		-			9				-		Brick red	color.			
	1//3 90	12.04	I	SPT	12	27					Temp. = 2	27 deg. Cel	sius		
	1440.00	-													
		-													
		-													
	1442.00	1200													
	1442.90	-		ерт	30	50/102			_		White cold	oration.			
		13.41	J	371	50/102	50/102				13.41	Temp. = 3	35 deg. Cel	sius		
		-													
	1441.00														
	1441.90	- 14													
		-													
		-													
	1440.00	15													
	1440.90	- 15													
		_													
		-													
	4 400 00	-													
	1439.90	16													
		_													
		-													
		-													
	1438.90	-17													
		_													
-		-													
/11/0		-													
DT 5	1437.90	18													
DT.G		Ľ													
ND		F													
ЪЛ		F													
5D.G	1436.90	- 19													
7901.		Ľ													
T 00		Ļ													
/_DO		F													
ź			1												

[							Q/I	5/00			EXPL	ORATIO	N LOG			
					ST	ART DATE	 	5/00								SHEET 1 OF 1
					EN	ND DATE		1-580	Ereeway E	vtoncio	n Proje	<b>~</b> +		STATION	135+20	
					JC	B DESCRI	PTION			vada		<i></i>		OFFSET		
	22				LC	OCATION	12	51200	Journy, Nev	aua				ENGINEER	John Dee	re 792D-I C
	×.				BC	ORING	0	70 01 4							Tim A.	
	1				E./	A. #		FE 10 (	) m)		DATE	DEPTH m	ELEVEL	DRILLING	 ΝΙ/Δ	
	Ve	,			GF	ROUND EL	EV4	<u>50.19 (</u>	111) 1/A		9/5/00	NE		METHOD	X	0/5/2000
				-	HA	AMMER DR	OP SYS	STEM	I/A				J	BACKFILLED	C	ATE
	ELEV. (m)	DEPTH (m)		5AM D.	IPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI		ESCRIPTION		REMARKS
		-								SC	0.30	Loose to r SAND.	medium dei	nse, brown, CLA	AYEY	
		-										Soft, oran	ge brown to	o light grey, con rmally altered		
												BEDROCI	K with soil i	ndex properties	of a	
	1455.19	<u>+1</u>										Sandy Cla	ay to Claye	y Sand.		Temp. = 26.9
		-														deg. Celsius
		-														
	1454.19	-2														
		-														
		-														
		2.7	74							_						
	1453.19	<b>3</b> 3.0	05 ^A	\ C	GRAB				Chem.		3.05					4
		-														
		-														
		_														
	1452.19	-4														
		-														
		-														
	1451.19	-5														
		-														
		-														
	1450.19	-6														
		-														
		-														
	1449.19	-7														
		-														
		-														
1/01																
Γ 5/1	1448.19	-8														
[GD]		-														
Б		-														
N																
D.GP.	1447.19	-9														
90151		-														
200		-														
DOT		Ľ														
≥́																

							0/	5/00			EXPL	ORATIO	N LOG			
					ST	FART DATE	<u> </u>	5/00								SHEET 1 OF 1
					El	ND DATE	9/:	5/00	 	vtonoi	n Droio	~4		STATION	135+20	
					JC	DB DESCRI	PTION	1-00U		xiensi	on Projec	<i>.</i>		OFFSET	<u>10 LI</u>	
	dan.				LC	DCATION			Jounty, Nev	aua				ENGINEER		
	2 Mr. M				BC	ORING		5+20L	-		0001				Tim A.	
	4 m				E.	A. #		79-01-3	)				ELEVEL	DRILLING		
	2c				GI	ROUND EL	EV14	56.67 (	<u>m)</u>		9/5/00	NE		METHOD	N/A	
					HA	AMMER DR	OP SYS		I/A					BACKFILLED	<u>res</u> [	DATE9/5/2000
	ELEV. (m)	DEPT (m)	Ή	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		-								sc	0.46	Loose to r SILTY SA veneer.	medium dei <b>ND</b> with a t	nse, brown, <b>CL/</b> hin surface grav	<b>AYEY,</b> ′el	
		-										Soft, oran	ge brown to	b light brown, co	mpletely	-
		-										BEDROC	K with soil i	ndex properties	of a	
	1455.67	1										Sandy Cla	ay to Clayey	/ Sand.		Temp. = 27.4
		_														deg. Celsius
		-														
		-														
	1454.67	-2														
		-														
		-														
		-														
	1453.67	<b>3</b> 3.	20													
		- 3.	51	А	GRAB	8			Chem		3.51					
		-														-
	1450.67															
	1452.07	-4														
		-														
		-														
	1451 67	- 5														
	1401.07	Ļ														
		-														
		-														
	1450.67	-6														
	1100.01	Ļ														
		-														
		-														
	1449.67	-7														
		F														
		-														
1/01		Ľ														
5/1:	1448.67	-8														
GD1		-														
DOT		F														
NN I		Ĺ														
J.GP,	1447.67	<b>-</b> 9														
3015E	-	-														
3200		F														
DOT		Ľ														
Ž																

						0/	5/00			EXPLORATION LOG			
				ST	FART DATE	9/3	5/00						SHEET 1 OF 1
				El	ND DATE	9/:	5/00	 		n Ducient	STATION	135+20	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	<u>10 R I</u>	
	.tw			LC	OCATION		ashoe (	County, Nev	ada		ENGINEER	JRU Jahn Daa	
	- Mar			BC	ORING	13	5+20R				EQUIPMENT	John Dee	
	Ä	<b>K</b> 1		Ε.	A. #	00	079-01-5	5		GROUNDWATER LEVEL	OPERATOR	A.	
	in the second second second second second second second second second second second second second second second			GI	ROUND EL	EV14	55.75 (	m)		DATE DEPTH m ELEV. m	METHOD	N/A	
			1	HA	AMMER DR	OP SYS	STEM_N	I/A			BACKFILLED	_YesD	ATE9/5/2000
	ELEV.	DEPTH	SA	MPLE	BLOW C	OUNT	Percent		USCS		SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group	Loose to medium der	se, brown, CLA	AYEY,	
		-							SIVI	0.30 SILTY SAND.		harad	
										hydrothermally altered	d, <b>GRANITIC B</b>	EDROCK	
		_								with soil index proper	ties of a Sandy	Clay to	Tama 07.0
	1454.75 -	-1								Clayey Sand.			deg. Celsius
		-											0
		-											
		-											
	1453 75 -	_2											
	1-100.10	_											
		_ 2.44											
		2.74	А	GRAB	8			Chem		2.74			
		-											
	1452.75 -	-3											
		-											
		_											
		_											
	1451.75 -	-4											
		-											
		-											
		-											
	1450 75	-5											
	1400.70	-											
		_											
		-											
		-											
	1449.75 -	-6											
		È											
		Ĺ											
		_											
	1448.75 -	-7											
		F											
		+											
/01		F											
5/11,	1117 75	<u>8</u>											
3DT	1441.10	-											
OT.C		_											
_ ∠		-											
٩ſ		F											
5D.G	1446.75 -	-9											
7901		-											
T 00.		F											
		L											
N													

						0/	1/00			EXPLORATION LOG			
				ST	FART DATE	9/	1/99						SHEET 1 OF 1
				El	ND DATE	9/	1/99			- Desired	STATION	<u>135+60 "P"</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensio	n Project	OFFSET	<u>36.88 LT</u>	
	. Inc.			LC	OCATION		ashoe (	County, Nev	ada		ENGINEER		
	1W			BC	ORING	13	85+60 (\	NQB-6)	r		EQUIPMENT	JD 200LC	
	1 A			E.	A. #	00	079-01-5	5		GROUNDWATER LEVEL	OPERATOR	-	
	in the			GI	ROUND EL	EV14	55.26 (	m)		DATE DEPTH m ELEV. m	METHOD	Trackhoe	
				HA	AMMER DR	OP SYS		IA		3/1/33 NL	BACKFILLED	_YesDA	TE 8/20/1999
			SA	MPLE	BLOW CO	DUNT							
	ELEV. (m)	DEPTH (m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		0.15	5				110001 4			Dry, medium dense, b	orown Silty Gra	vel with	
		0.46	9A	GRAB				PI, Sv	GM	Sand with 18% low pl 0.49 coarse sand, and 53%	asticity fines, 2 6 fine gravel. S	9% fine to	
		-	9R	GRAB				PL Sv	GW	staining on gravels.	ariable unit wit	h	
		0.79						1 1, 00	GM	0.76 horizontally layered si	liceous sinter. h Sand	Excavates	
	1454.26	-1								Dry, dense to very de	nse, white Wel	I-Graded	
		-								Gravel with Silt and S	Sand with 8% lo	sand and	
		-								66% fine gravel. Unit	is composed o	f siliceous	
		-								Sinter which excavate Gravel with Silt and S	s out as a Well and Excavate	-Graded	
	1453.26	<b>_</b> 2								bucket tooth marks in	very dense sili	ceous	
	1100.20	_								sinter. Very difficult excavation	on due to silice	ous sinter	
		-								deposits.			
		-											
		-											
	1452.26	-3											
		Ľ											
		_											
	1451.26	-4											
		-											
		-											
		-											
	1450.26	5											
	1450.20												
		_											
		_											
		-											
	1449.26 ·	-6											
		-											
		F											
	1448.26	<b>⊥</b> 7											
		·											
		-											
Σ		-											
/11/0		-											
DT 5.	1447.26	-8											
T.GL		F											
00		Ē											
N		[											
GP.	1446.26	-9											
015D		ļ											
)029(		-											
OT C		-											
۵ <u>&gt;</u>		-											
Z		1	1	1	I		1	1	1	1			

						Q/·	11/00			EXPLORATION LOG			
				S	TART DATE	O/	11/00					105 - 1	SHEET 1 OF 2
				El	ND DATE	0/	11/33	Freewoy F	vtona	n Project	STATION	135+71 "P"	
				JC	OB DESCRI	PTION	086-1	Prieeway E			OFFSET	9.82 LT	
	. Days			LC	OCATION	VV		Jounty, Nev	ada		ENGINEER		
	- Mar			B	ORING	13	5+70	_		]	EQUIPMENT		
	Ä			E.	.A. #	00	)79-01-5	5		GROUNDWATER LEVEL		1 6(613011	
	ž.			G	ROUND EL	EV14	52.70 (	m)		DATE DEPTH m ELEV. m	METHOD	HQ Core	
			1	H	AMMER DR	ROP SYS	STEM_R	Rope - Cathe	ead		BACKFILLED	Yes DATE	8/12/1999
		חבטביי	SA	MPLE	BLOW C	OUNT	_		11000				
	⊏∟⊏∨. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATERIAL DE	SCRIPTION		REMARKS
		_								Soft, purple to white,	completely wea	ithered,	
		-								Consistency of sandy	silt to sandy cl	ay.	
		-											
		F .											
	1451.70 -	<u>†</u> 1											
		Ľ											
		-											
		-											
	1450.70 -	-2											
		- 2.44											
					7				1	Temp.= 27 deg. Cels	ius.		
		- 2.90	A	SPT	12	62							
	1449.70 -	-3							1				
		-											
		F											
		Ľ											
	1448 70 -	3.96	-						-	<b>F</b> anna <b>1</b> ( )	(ma ana ) -		
	1110.70	-	в	SPT	6	50				⊢ew competent rock	iragments.		
		4.42	<u> </u>		50				-				
		-											
	4 4 4 7 70	-											
	1447.70 -	_ <b>_</b> >											
		- 5.49											
		-	_	OPT	9				1	Temp.= 24 deg. Cels	ius. Fault encou	untered -	
		5.94	C	591	33	60				slickensides visible.	urple coloration	n.	
	1446.70 -	-6							]				
		Ľ											
		-											
	1445.70 -	7 7.01	<u> </u>		9				-	Slightly hard and brow	-	- 39 deg	
		-	D	SPT	35	85				Celsius. White sandy	clay alteration.	- Ja uey.	
		- 7.47	-		50				-				
1/01													
5/11	1444.70 -	-8											
GDT		ŀ											
DOT.		8.53											
N		-	F	CDT	E0/0	50/0			]				
GP	4440 =0	8.99	E	521	50/0	50/0							
15D.	1443.70 -	_9	Ī								again with a ft	20000	
0670		F								Color varies from pin	eccia with soft z k, tan to grey.	zones.	
0 TC		-									. ,		
Д Л		+											
z			1	I		1	L		1				

ſ						8/	11/00			EXPLORATION LOG			
				S	FART DAT	= <u>0/</u> 8/	11/00						SHEET 2 OF 2
				E	ND DATE	-0/	11/99		vtonoic	n Drojaat	STATION	<u>135+71 "P</u>	"
				JC	DB DESCR		1-580		xtensic	on Project	OFFSET	9.82 L I	
				LC	OCATION			Jounty, Nev	ada		ENGINEER	Ackor	
	2Mm			BC	ORING	13	5+70				EQUIPMENT	Peterson	
	The second second second second second second second second second second second second second second second se			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL		1 01013011	
	ž.			GI	ROUND EL	.EV14	52.70 (	m)		8/11/99 NE	METHOD	HQ Core	
				HA	AMMER DF	ROP SYS	STEM _R	ope - Cathe	ead		BACKFILLED	Yes DA	TE 8/12/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
Ī		10.06			15					Temp.= 38 deg. Cels	us.		
		10.52	F	SPT	24 27	51				10.36 Soft to slightly hard, g Bedrock	rey, altered <b>Gr</b>	anitic	
		_								Bourook			
	1441.70	-11											
		-											
		11.58							_				
		_	G	SPT	24	72				Temp.= 36 deg. Cels	us.		
	1440.70	- <u>12^{12.04}</u>			38				-				
		-											
		_											
		_											
	1439.70	- <b>13</b> 13.11											
		_	ц	ерт	50/107	50/107				Temp.= 22 deg. Cels	us.		
		13.56	п	5P1	50/127	50/127							
		_											
	1438.70	-14											
		_											
		-								44.00			
		-								14.63			
	1437 70	-15											
	1407.70	-											
		-											
		-											
	4 400 70	-											
	1436.70												
		_											
		-											
		-											
	1435.70	-17											
		_											
-		_											
11/0		-											
DT 5/	1434.70	-18											
T.GL		F											
DC		[											
۲ ۲		F											
D.GF	1433.70	-19											
9015		-											
- 007		Ĺ											
DOT		[											
≥́													

						Q//	5/00			EXPL	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	5/00								SHEET 1 OF 1
				E١	ND DATE	9/3	5/00		vtonoia	n Droio			STATION	135+70	
				JC	DB DESCRI	PTION	1-500			ITFIOJEC	<i>.</i>		OFFSET		
	dan.			LC	OCATION		ashoe	Jounty, Nev	aua				ENGINEER		
	2 Mr. M			BC	ORING	13			I					Tim A.	
	4			E.	A. #		79-01-0	)				ELEVEL	DRILLING		
	2c			GI	ROUND EL	EV14	51.24 (	m)		9/5/00	NE		METHOD	N/A	
			N	HA	AMMER DR	OP SYS	STEM	/A					BACKFILLED	<u>res</u> C	DATE9/5/2000
Ī	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		ΜΔΤΙ		SCRIPTION		REMARKS
	(m)	(m)	NO.	TTPE	Increments	<u>300 mm</u>	Recov'd		Group	0.15	Loose to r	nedium de	nse brown CL		
		-								0.15	SAND				-
											Soft, brow weathered	n to orange , hydrothe	e brown, comple mally altered, <b>C</b>	etely GRANITIC	
		_									BEDROCI	K with the s	oil index proper	ties of a	
	1450.24	<u>+</u> 1									Sanuy Cia	iy.			
		-													
		-													Temp. = 32.0
										1.83					deg. Ceisius
	1449.24	-2									Soft, oran	ge to pale v	white (highly var	riable),	
		-									nyarotnen	nany altere			
		-													
	1448.24	-3								3.05					-
		-									Moderatel	y hard, pal mally altere	e white to light g d. <b>VOLCANIC</b>	grey,	
		-									BEDROCI	κ	-,		
	1447.24	-4													
		-													
		4.42		CPAR				Chom	-						
		4.72	2	GIVAL				Chem	-	4 88					
	1446.24	-5								1.00					-
		-													
		-													
	1445.24	-6													
		F													
		Ľ													
		Ĺ													
	1444.24	<b>-</b> 7													
		F													
		F													
1/01		F													
r 5/1	1443.24	-8													
LGD.		-													
DO		F													
N		Ē													
О.GP,	1442.24 ·	-9													
<u> 3015</u>		F													
) 200		F													
DOT		Ĺ													
Ž															

							0/	5/00			EXPLORATION LOG			
					S	TART DATE	<u> </u>	5/00						SHEET 1 OF 1
					E	ND DATE	9/	5/00	 	vtonoio	- Droigot	STATION	135+70	
					J	OB DESCRI	PTION	006-1		xiensio		OFFSET	I0 LI	
	Sm	- ili			L	OCATION			Jounty, Ne	/ada		ENGINEER	JKU John Dee	ro 702D-I C
	2 MM				В	ORING		35+70L		[		EQUIPMENT	Tim A	
	Ą				E	.A. #		079-01-5	<u>`</u>		GROUNDWATER LEVEL	DRILLING		
	2				G	ROUND EL	EV14	53.68 (	m)		9/5/00 NE	METHOD	N/A	
					Н	AMMER DR	OP SYS	STEM	I/A			BACKFILLED	_YesD	ATE9/5/2000
	ELEV. (m)	I	DEPTH (m)	SA NO	MPLE	BLOW Co 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_								SC	Medium dense, brown 0.30	, CLAYEY SAN	ND.	
		-									Hard, light grey to pale	e white, moder	ately	
		-									weathered, SINTER			
	1452.68		1								0.91 Moderately hard vello	w-brown to rec	l-brown	
		_	•								(highly variable), hydro	thermally alter	red,	
		-										κ.		
		-												
	1451 68		2											Temp. = 32.3
	1401.00	_	2								Excavator could not re	ach bevond 6.	1 meters.	deg. Celsius
		-												
		-												
	1450.68	_	2											
	1400.00	_	5								0.05			
		-									Soft, red-grey to pale p	ourple-grey,		
		-									hydrothermally altered	, VOLČANIC E	BRECCIA	
	1440 68		4											
	1449.00	_	4											
		_												
		-												
	1449 69	_	5											
	1440.00	_	5											
		_												
		-	5.79	9										
	1 4 4 7 6 9	-	6 0 4	A	GRA	3			Chem	1	0.40			
	1447.00	-	0 6.10	0							6.10			
		_												
		-												
	1446 69	_	7											
	1440.00	_	'											
		-												
10		-												
5/11/	1445.00	F	.0											
3DT	1445.68		Q											
DOT.C		-												
		┝												
GPJ	4 4 4 4 6 6	╞	•											
115D.	1444.68	T	Э											
06700		F												
ŌTO		-												
		-												

							o//	5/00			EXPLORATION LOG			
					S	TART DATE	<u> </u>	5/00						SHEET 1 OF 1
			)		El	ND DATE	9/:		 		n Ducie et	STATION	135+70	
					JC	DB DESCR	PTION	1-580	Freeway E	xtensio	on Project	OFFSET	<u>10 R I</u>	
	an				LC	OCATION		asnoe (	Jounty, Nev	ada		ENGINEER		ro 702D I C
	2 Mrd		3		B	ORING	13	5+70R				EQUIPMENT	Tim A	
	Ä		57		E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL			
	Ľ	7			G	ROUND EL	EV14	48.82 (	m)		9/5/00 NE	METHOD	N/A	
		`			H	AMMER DF	ROP SYS	STEM	I/A			BACKFILLED	_YesD	ATE9/5/2000
E	ELEV.	DEF (n	PTH n)	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent Recovid	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	()		.,			Increments	500 mm	INCOV U			Medium dense, brown	n, CLAYEY SAI	ND.	
										SC	0.46			
		F									Soft, pale white, com	bletely weather	ed,	
		F									BEDROCK.	J, VOLCANIC		Temp. = 31.5
14	47.82 ·	-1												ueg. Ceisius
		Ľ												
		Ļ												
		-												
14	46.82 ·	-2	2.13											
		-	2 4 4	А	GRAE	3			Chem		2.44			
			2.44								2.44			
		Ľ												
14	45.82 ·	-3												
		F												
		-												
		F												
14	44.82 -													
	44.02	-												
		-												
		-												
	10.00	-												
144	43.82 ·	5												
		F												
		-												
		-												
14	42.82 ·	-6												
		[												
		F												
		F												
14	41.82 ·	-7												
		F												
11/01		F												
ند 14-	40.82 ·	-8												
T.GD		F												
DO		F												
≥		Ľ												
d9 14	39.82 ·	-9												
9015L		F												
0079		+												
DO		F												

							. 10	/6/00			EXPLORATION LOG			_	
					S		10	/6/00					405 00	S	HEET 1 OF 1
					El	ND DATE			Eroowov E	vtonci	n Project	STATION	135+80		
					JC	DB DESCRI	PTION	1-560		xtensi		OFFSET	15 LI		
	, two				LC	OCATION		ashoe	County, Nev	ada		ENGINEER	JRU	<b>FO0</b>	
	W	6			B	ORING	13	85+80				EQUIPMENT		1 FUZ	20
	1 A		,		E.	A. #	00	79-01-	5		GROUNDWATER LEVEL	OPERATOR	Папу		
	in the	1			G	ROUND EL	EV14	45.00 (	m)		DATE DEPTH m ELEV. m	METHOD	N/A		
		. \			H/	AMMER DR	OP SYS	STEM_N	I/A		10/0/00 INE	BACKFILLED	Yes	DATE	10/6/2000
						BLOW C		1	1	1		-			
	ELEV. (m)	DEP (m	TH - )	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group			the brown		REMARKS
		- (	0.00	ΔΔ	GRAF	2			SV PI		to dark brown, dry to	slightly moist, v	ery dense,		
		-	0.61	~~	GIVAL	1			5V, F1		with estimated 15% r	ion-plastic to lov	w plastic		
		- '	.01							-	coarse gravel.	arse sand, 25%	tine to		
		-								SM					
	1444.00	-1													
		1	.83								1.83				
	1443.00 ·	-2									POORLY GRADED S	AND with SILT	and		
		-		А	GRAE	8			SV, PI		dense, with estimated	d 5-10% non-pla	astic fines.		
		_ 2	2.44							-	50-60% fine to coarse	e sand, 35-45%	fine to		
		-								SP	coarse, subangular g	ravel to +/5mm id boulders to +	1 IN 350mm		
		-								SM	comprise approximat	ely 20% of soil	mass.		
	1442.00	-3													
		-													
		-									3.51			_	
		- :	3.66							-	arev, slightly moist, lo	AND with GRA	dense.		
	4 4 4 4 . 0.0			в	GRAF	2			SV PI		with estimated <5% r	ion-plastic fines	, 70% fine		
	1441.00	<b>4</b>	1 27	5		1			01,11	SP	to coarse sand, 25-30	0% fine to coars	se,		
			1.21							-	Completely weathere	d granite cobble	es to		
		_									4.57 +150mm comprise ap	proximately 10	% of soil	4	
		-									POORLY GRADED S	AND with SILT	and	/	
	1440.00	-5									GRAVEL olive brown	, slightly moist,	medium		
		-									dense, with estimated	d 10% non-plas	tic fines,		
		- 5	5.49							SP	subangular to subrou	nd gravel to +7	5mm.		
		-									Cobbles to +150mm	comprise appro	ximately		
		-		С	GRAE	8					576 01 5011 11/255.				
	1439.00	6 6	6.10							-	6.25				
		Γ									0.20			-	
		F													
	1438.00 ·	-7													
		-													
		-													
-		-													
/11/0		-													
DT 5	1437.00	-8													
T.GI		-													
Ö		-													
Ş		F													
GPJ	1426.00														
15D.	1430.00	_ y													
0670		L													
То		F													
8		L													
Ž															

						Q /-	10/00			EXPLORATION LOG			
				S	TART DATE	<u> </u>	11/00					100 01 "	SHEET 1 OF 4
				El	ND DATE	_0/	11/22		vtensi	on Project	STATION	136+21 "P'	
				JC	OB DESCRI	PTION	1-500		xiensi vodo		OFFSET	9.64 KT	
	- Arr	<b></b>		LC	OCATION	10		Journy, Nev	aua		ENGINEER	Acker	
	3.MM			B	ORING	0	00+20					Peterson	
	The second second second second second second second second second second second second second second second se			E.	A. #		19-01-0	) m)		DATE DEPTH m ELEVEL	DRILLING		
	le			G	ROUND EL	EV14	44.97 (	m) Nana Cathu		8/11/99 NE	METHOD	HQ Core	0/40/4000
				H	AMMER DR	ROP SYS	STEM _	cope - Cathe	ead		BACKFILLED	YesDA	TE
	ELEV.	DEPTH	SAI		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd			Soft, yellow to white,	completely wea	thered,	
		-								hydrothermally altered	d Granitic Bedr	ock.	
										highly variable.	ciay and sandy	/ SIIL -	
		-											
	1443.97 -	-1											
		-											
		- 1.52 -			11				_				
		-	А	SPT	25	61							
	1442.97 -	- <u>1.98</u>			36				-				
		-											
		_											
	1441.97 -	<b>3</b> 3.05			10				_				
		-	в	SPT	21	44		w, PI, Sv					
		- 3.51			23				_				
		-											
	1440.97 -	-4											
		-											
		4.57							_				
		-	с	SPT	6 12	26		w, PI, Sv					
	1439.97 -	<b>5</b> 5.03			14				-	Consistency of sandy	silt.		
		-								Color change to light	grey/white.		
		_											
	1438.97 -	6 6.10											
		-	D	SPT	18 25	65		w. Pl. Sv		Temp.=30 deg. Celsion	us. Consistency	of silty	
		6.55			40			,,	_	Sund/Sundy Silt.			
		_											
	1437.97 -	-7											
		-											
		7.62											
11/01		_	F	SPT	4	27		W PL SV		Temp.= 37 deg. Cels	ius. Consistenc	y of a	
T 5/1	1436.97 -	8 8.08		5FT	16	21		w, F1, 3v			y Sanu With 407	o III les.	
T.GD		-											
DO		Ľ											
NN F.		Ļ											
D.GP	1435.97 -	-9 _{9 14}											
9015		-	_	0.07	10	01			1	Temp.=39 deg. Celsi	us. Consistency	of sandy	
- 007		9.60	F	SPT	36	61		W, PI, SV		silt.			
DOT		_							]				
N													

[						8/·	10/00			EXPLO	ORATIO	N LOG			
				ST		<u> </u>	11/00							400.04.85	SHEET 2 OF 4
				E	ND DATE		1.580	 Freeway F	vtoncia	n Projec	<b>•</b> †		STATION	136+21 "F	,
				JC	DB DESCR	PTION	ashoo (		ada		~		- OFFSET	<u>9.04 KT</u> MG	
	22			LC	DCATION	13	6+20	Journy, Nev	uuu					Acker	
	× v			BC _	DRING	0	70-01-4	5		GROUI				Peterson	
	1			E.	A. #	1/	лл 07 (	, m)		DATE	DEPTH m	ELEV. m	DRILLING		
				GI		EV. <u>14</u>	R	one - Cath	bee	8/11/99	NE		METHOD		8/12/1999
				HA	AMMER DF	ROP SYS			au_				BACKFILLED	D	ATE 0/12/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL I	DESCRIPTION		REMARKS
		-													
		10.67													
		- 10.07			13				-		Temp.= 4	1 deg. Ce	elsius. Consistenc	y of clayey	
	1433.97 -	-11 _{11.13}	G	SPT	30 50/140	50/140					gravelly s	and.			
		_													
		-													
		_													
	1432.97 -	-12													
		12.19			11				-		Temp.= 4	1 dea. Ce	elsius. Consistenc	v of siltv	
		- 12.65	н	SPT	24 40	64					gravelly s	and.		, ·,	
		_ 12.00							-						
	1431.97 -	-13													
		-													
		-													
		- 13.72			11				-		Temp = 4	5 dea Ce	elsius		
	1430.97 -	-14	Т	SPT	23	49					remp.= +	o dog. Ot			
		- 14.17			20				-						
		-													
		_													
	1429.97 -	- 15													
		-													
		-													
		_													
	1428.97 -	-16 ^{16.00}			6				-		T 0		1-1		
		-	J	SPT	6	19					Temp.= 3	8 deg. Ce	eisius		
		- 16.46			13				-						
		_													
	1427.97 -	-17									Slightly ha	ard zones	i.		
		-													
		- 17.53													
/01		-	к	SPT	5 12	50/76					Temp.= 6	5 deg. Ce	elsius		
5/11	1426.97 -	17.98			50/76				-						
.GDT		-													
DOT		-													
N		Ē													
.GPJ	1425.97 -														
9015E		-	1	SPT	33	50/0									
3700		- 19.51			50/0				-						
рот		Ľ													
Ž		ſ													

						0/	10/00			EXPL	ORATIO	N LOG			
				S	TART DATE	<u> </u>	10/99								SHEET 3 OF 4
				El	ND DATE	8/	11/99	 					STATION	<u>136+21 "P"</u>	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Projec	л Л		OFFSET	<u>9.64 R1</u>	
				LC	OCATION	VV	ashoe (	County, Nev	ada				ENGINEER	MG	
	2Wm	6		B	ORING	13	86+20					]	EQUIPMENT	Acker Peterson	
	NA.			E.	A. #	00	)79-01-8	5		GROU	NDWATEF		OPERATOR	Feleison	
	and the			G	ROUND EL	EV14	44.97 (	m)		DATE 8/11/00		ELEV. m	METHOD	HQ Core	
			1	H	AMMER DR	OP SYS	STEM_F	Rope - Cath	ead	0/11/00			BACKFILLED	_Yes DA	TE 8/12/1999
	ELEV.	DEPTH	SAI		BLOW C	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION	I	REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd								
		20.57			00						<b>-</b>				
		_	м	SPT	23 57	107					Temp.= 6	3 deg. Cels	ius		
	1423.97 ·	-21 ^{21.03}			50				-						
		-													
		-									Grades to	slightly har	d and highly alt	tered.	
	1422.97	-22													
		_													
		-													
		-													
	1/21 07	- 23													
	1421.97	23													
		_													
		23.62							-		Granitics	tructure is h	ecoming readily	v visible	
		-	Ν	SPT	50/0	50/0					Oranitic 3		econning reading	y visible.	
	1420.97	<u>-2424.08</u>							-						
		_													
		_													
		-													
	1419.97	- 25													
		_								25.60					
		_									Hard, frac	ctured, gree	n grey, altered	Granitic	
	1418.97 ·	-26													
		-													
		26.67													
			~	<u></u>	====				1						
	1417.97 ·	+27 _{27.13}	0	SPT	50/0	50/0									
		-							1						
		F													
1/01															
5/1	1416.97	-28													
GDT	-	-									Temp - 2	2 dea Cela	ius		
DOT		-									remp.= 2		103		
NV		-													
GPJ	1/15 07	- 20													
115D.	1415.9/ .	-29													
06700		F													
OT C		-													
		F													
2		1	I		1		1	1	1						

ĺ						o /-	10/00			EXPLO	ORATIO	N LOG			
				ST	ART DATE	0/	10/99								SHEET 4 OF 4
				E١	ND DATE	8/	11/99						STATION	136+21 "P"	
				JC	B DESCRI	PTION	1-580	Freeway E	xtensio	on Projec	л Л		OFFSET	9.64 RT	
	-sm			LC	CATION		ashoe (	County, Nev	ada				ENGINEER	Ackor	
	2 MM	6		BC	DRING	13	6+20					]	EQUIPMENT	Peterson	
	Z.			Ε.	A. #	00	79-01-5	5		GROU					
	n.	~		GI	ROUND EL	EV14	44.97 (	m)		8/11/99	NE	ELEV. M	METHOD	HQ Core	
			1	HA	MMER DR	OP SYS	STEM _R	lope - Cathe	ead				BACKFILLED	_Yes DA ⁻	TE <u>8/12/1999</u>
	ELEV.	DEPTH	SAI	MPLE	BLOW CO		Percent		USCS		MATI				DEMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd	LAB ILSIS	Group						REMARKS
		-													
		-								30.48					
		_													
	1413.97 -	-31													
		-													
		-													
		-													
	1412.97 -	-32													
		-													
		-													
		-													
	1411.97 -	-33													
		-													
		-													
		-													
	1410.97 -	-34													
		-													
		-													
		-													
	1409 97 -	-35													
	1100.07	-													
		-													
		-													
	1408.97 -	-36													
	1400.07	-													
		-													
		-													
	1407 97 -	-37													
	1407.07	- 01													
		-													
/01		-													
5/11,	1406.97 -	- 38													
GDT	1700.31														
DOT		-													
N		+													
GPJ	1/05 07 -	- 30													
015D.	1400.97 -	- 29													
)6200		F													
Ď		F													
		-													

							Q/	5/00			EXPLORATION LOG			
					ST	FART DAT	E	5/00						SHEET 1 OF 1
					EN	ND DATE		1 590	Eroowov E	vtoncio	n Project	STATION	136+20	
					JC	DB DESCR	IPTION			vada		OFFSET		
	An				LC	OCATION		261200		aua			John Dee	re 792D-LC
	WWW				BC	ORING							Tim A.	
	17				Ε.	A. #		146 04 (	) m)		DATE DEPTH m ELEV.m	DRILLING	 ΝΙ/Δ	
	Ve			_	GI	ROUND EI	_EV	+40.04 ( N	111) 1/A		9/5/00 NE	METHOD	 	0/5/2000
					HA	AMMER D	ROP SY	STEM	VA	I		BACKFILLED	C	DATE
	ELEV. (m)	DEPTI (m)	H N	SAN O.	/PLE TYPE	BLOW C 150 mm Increments	COUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-								SM	0.30 with GRAVEL.	ise, brown, SIL	TY SAND	
		-									Moderately hard, pale	white to light g	irey,	
		-									moderately to highly	weathered, <b>Sin</b>	IER.	
	1445.04 -	<b>-</b> 1												Temp. = 39.7
		-												deg. Celsius
		-												
		-												
	1444.04 -													
	1444.04	-												
		-												
		2.7	74											
		- 30	15	A	GRAB				Chem		3.05			
	1443.04 -										3.00			-
		-												
		-												
		-												
	1442.04 -	-4												
		L												
		-												
		-												
	1441.04 -	-5												
		-												
		-												
	1440.04 -	-6												
		Ē												
		-												
		-												
	1439.04 -	-7												
		-												
11/01		-												
T 5/	1438.04 -	-8												
T.GD		-												
Ö		Ľ												
2 ∩		F												
Q.GP.	1437.04 -	-9												
90151		F												
\$ <u>2</u> 00		+												
DOT		Ľ												
Ž														

						Q//	5/00			EXPLORATION LOG			
				S	TART DATE		5/00						SHEET 1 OF 1
				EI	ND DATE	9/3	5/00	 	vtonoi	n Drojant	STATION	136+20	
				JC	OB DESCRI	PTION	1-580	Freeway E	xtensio	on Project	OFFSET	10 L I	
				LC	OCATION		ashoe (	County, Nev	ada		ENGINEER		
	1 May			B	ORING	13	36+20L			]	EQUIPMENT	Tim A	
	Ä			E.	.A. #	00	079-01-5	5		GROUNDWATER LEVEL			
	He	1		G	ROUND EL	EV14	47.28 (	m)		9/5/00 NE	METHOD	N/A	
			1	H.	AMMER DR	OP SYS	STEMN	I/A			BACKFILLED	_YesD	ATE9/5/2000
	ELEV.	DEPTH	SA		BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m) _	110.		Increments	<u>300 mm</u>	Recov'd		SC	Dense, brown, CLAY	ey sand.		
		-								0.40 Soft light grey to pak	white comple	toly	
		-								weathered, hydrother	mally altered,	lely	
	4 4 4 9 9 9	-								VOLCANIC BEDROC	K		
	1446.28												
		_											Temp. = 40.0
		-											deg. Celsius
		-											
	1445.28	-2											
		Ľ											
		_											
		-											
	1444.28	-3											
		-											
		3.81											
	1443.28	4 4.11	А	GRAE	3			Chem		4.11			
		-											
		-											
	1442.28	-5											
		-											
		-											
		-											
	1441 28	<b>–</b> 6											
	1111.20	Ļ											
		-											
		-											
	1440.00	7											
	1440.28	<b>[</b> '											
		_											
5		-											
5/11/0		-											
DT	1439.28	8											
OT.G		Ĺ											
∑ ≥		F											
Ъ		F											
5D.G	1438.28	-9											
7901:		t											
T 00		[											
DO		F											
Ž													

					0.7		. 9/!	5/00			EXPL	ORATIO	N LOG			
					SI		<u> </u>	5/00							126.20	SHEET 1 OF 1
					EN			1-580	 Freeway F	xtensio	n Proie	ct		STATION	130+20 10 PT	
					JO	BDESCRI	PTION W	ashoe (	County Nev	vada				OFFSET	JRO	
	22				LO	CATION	13		bounty, not	uuu					John De	ere 792D-LC
	North Walt				BC	RING	0	70 01 6			CROU				Tim A.	
	The second second second second second second second second second second second second second second second se				E.A	A. #		1 3-01-C	m)		DATE	DEPTH m	ELEVEL	DRILLING	Ν/Λ	
		, , ,			GF		EV	44.95 (	111) 1/A		9/5/00	NE		METHOD	 	0/5/2000
					HA	MMER DR	OP SYS	STEM	I/A					BACKFILLED	res	DATE
	ELEV. (m)	DEPTH (m)	I NC	AMF D. T	PLE YPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		_								SC	0.30	Medium d	lense, brow	n, <b>CLAYEY, SIL</b>	.TY	
		-									0.00	Soft, oran	ge-brown to	o red-brown, co	mpletely	1
		-										veathered VOLCANI	d, hydrothei I <b>C BEDROC</b>	mally altered, <b>K</b>		Temp. = 37.5
	1442.05	⊥₁														deg. Celsius
	1443.95	Τ'														
		1.5	2													
		-	A	G	RAB				Chem		1.00					
		1.8	3	-							1.83					-
	1442.95	<u>_</u> 2														
		-														
		-														
		-														
	1441.95	-3														
		-														
		-														
	1440.95	<u>+</u> 4														
		-														
		_														
		-														
	1439.95	-5														
		-														
		Ľ														
		_														
	1438.95	-6														
		-														
		-														
		Ĺ														
	1437.95	<b>—</b> 7														
		-														
		-														
01		-														
5/11/	1426.05	L.														
GDT	1430.95	ް														
DOT.0		-														
		F														
- L d E		+														
15D.C	1435.95	-9														
.0620		F														
<u>ЭТ 0(</u>		F														
		$\vdash$														
Z									L	1						

							Q/'	20/02			EXPLORATION L	.OG				
					S	FART DATE	0//	20/00 20/00							5	HEET 1 OF 2
					El	ND DATE	<u> </u>	1 500	Eroower 5	vtona:	n Project		STATION	136+71	"P" -	
					JC	DB DESCRI	PTION		Freeway E	xtensi	n Project		OFFSET	10.78 L	1	
	.044				LC	OCATION		ashoe (	Jounty, Nev	ada			ENGINEER			
	2.W.	e La			B	ORING	13	86+50				]	EQUIPMENT	ACKER Peterse	n	
	NA.		1		E.	A. #	00	79-01-5	5		GROUNDWATER LE	VEL	OPERATOR	Feleisc	11	
	J.				G	ROUND EL	EV14	47.51 (	m)		DATE DEPTH m EL 8/30/98 NF	EV. m	METHOD	Auger		
				1	H	AMMER DR	OP SYS		Rope - Cathe	ead			BACKFILLED	Yes	DATE	8/30/1998
		0000	<b>-</b> 1 ·	SAN	<u>//PLE</u>	BLOW CO	OUNT			11000	_					
	ELEV. (m)	DEP (m)	іН )	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group	MATER	IAL DE	SCRIPTION			REMARKS
		0	0.00	Δ	SPT	2	6			SM	0.24 Silty Sand top	psoil with	n high quantity o	of		
		- 0	).46	~	511	3			w, i i, ov	_	Moist, soft to	slightly I	nard, brick red t	o yellow,		
		-									hydrothermal	ly altered	d <b>Bedrock</b> , indi	scernible.		
		-									Arginic alterat			163.		
	1446.51 -	-1														
		[ ]	50													
		<u>1</u>	.52			5				-						
		-	00	В	SPT	5	10		w, PI, Sv							
	1445.51 -	<b>−</b> 2 ^{−1}	.98			5				-						
		-														
		Ĺ														
	1444.51 -	3 3	3.05													
		-		С	SPT	6	18		w. PL Sv							
		- 3	3.51	5	0.1	10				1						
		F														
	1443 51 -															
	10.01	Ļ														
		-	57													
		4	r.J/			3				-	Whitish purple	e.				
	4449 5 :	- 5	5.03	D	SPT	9	18		w, PI, Sv							
	1442.51 -	5				3				-						
		F														
		-														
	1441.51 -	6 6	6.10							-				<b>.</b> .		
		Ľ		Е	SPT	8	16		w, PI, Sv		White color a Celsius.	nd leach	ied - Temp. = 4	ö deg.		
		6	6.55			8				-						
		_														
	1440.51 -	-7														
		-														
		- 7	62													
101		[ '	.52	_		4				-						
5/11	1439 51 -	8 8	3.08	F	SPT	6	12		w, PI, Sv							
GDT	1 100.01									1						
DOT.		-														
NV_L		F														
ΓdΘ		-														
15D.(	1438.51 -	9 9	9.14							-				10 · -		
.0620		Ĺ		G	SPT	23	6		w, PI, Sv		White color a	nd leach	ied - Temp. = 14	40 deg. F		
71 00		9	9.60			3				-						
/_DC		-														
ź		1						L								

						8/ [,]	20/08			EXPLO	ORATIO	N LOG			
				S	TART DATE	<u> </u>	20/02								SHEET 2 OF 2
				EI	ND DATE	0/.	1 520	 Eroowov E	vtoncio	n Proioc	.+		STATION	136+71 "P	,"
				JC	DB DESCRI	PTION	1-500		vodo	II FIOJEC	, <b>i</b>		OFFSET	10.78 LT	
	2m			LC	DCATION	10		Journy, Nev	aua				ENGINEER	Acker	
	No.			B	ORING				[					Peterson	
	4			E.	A. #		19-01-0	) m)		DATE		FLEVEL	DRILLING	Augor	
	1			G	ROUND EL	EV14	47.51 (	m) Nana Cathu		8/30/98	NE		METHOD	Auger	0/20/4000
				H	AMMER DR	OP SYS	STEM _	tope - Cathe	ead				BACKFILLED	resD	ATE 8/30/1998
ſ	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS		MAT	ERIAL DE	SCRIPTION		REMARKS
	(m)	(m)			Increments	300 mm	Recov'd		Cicup						
		_													
		- 10.67	7												
		_	н	SPT	2	4		w PL Sv			Very soft	with chalky	texture.		
	1436.51	+11 _{11.13}	3		2	-		w, r i, ov	-						
		_													
		_													
	1435.51	+12	9												
											Temp. = 6	68 deg. Cel	sius.		
		_	I	SH				w, PI, Sv, C							
		12.80	)						-						
	1434.51	-13													
											wore con	ipetent form	lation.		
		13.72	2												
		14.00	J	SPT	17	50/102		w, PI, Sv	-		Temp. = 7	71 deg. Cel	sius.		
	1433.51	-14 ^{14.02}	2		50/102				-						
		-													
		_													
	1432.51	-15													
		_													Continued
		_													drilling to 19.8 meters to verify
		-													competent
	1431.51														soft zones
															encountered - no samples
		_													taken.
		_													
	1430.51	-17													
-		-													
;/11/0		+													
DT 5	1429.51	+18													
OT.G															
⊇ ≥		F													
1 L L		F													
15D.C	1428.51	+19													
0620		-													
0T 0		+								40.04					
		-								19.81					

						Q/·	1/90			EXPLORATION LOG			
				S	TART DATE	= <u> </u>	1/00					100	SHEET 1 OF 2
				El	ND DATE	9/	1/33		vtonci	n Project	STATION	<u>136+71 "P</u>	
				JC	OB DESCRI	PTION	1-500		vodo		OFFSET	10.78 LT MG	
	- San			LC	OCATION	10		Journy, Nev	aua		ENGINEER	Acker	
	2 Mm			B	ORING	13	00+70	-				Peterson	
	4			E.	.A. #		079-01-5	, ,		GROUNDWATER LEVEL			
	te			G	ROUND EL	EV. <u>14</u>	47.61 (	m)	<u> </u>	9/1/99 NE	METHOD	HQ Core	
				H	AMMER DR	ROP SYS	STEM _ R	Rope - Cathe	ead		BACKFILLED	Yes DA	TE 9/15/1999
	ELEV.	DEPTH	SA		BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS
	(m)	(m)	110.		Increments	300 mm	Recov'd			Very soft to soft, com	pletely weather	ed,	
										hydrothermally altered	d, variable color	ed	
		_								Beulock.			
		-											
	1446.61	<u>+</u> 1											
		-											
		1.52			8				-	Vary soft and shally	white in color wi	th the	
		_	А	SPT	9	23		w, PI, Sv		consistency of sandy	silt.	un une	
	1445.61	<u>1.98</u>			14				-	Temp. = 27 deg. Cels	sius		
		-											
		_ 2.44			7				-	ppm = 2.0			
		- 200	В	SPT	9	22		w, PI, Sv		Temp. = 37 deg. Cels	sius. Consistenc	y of sandy	
	1444.61	-3			13				-	Slit.			
		-											
		-											
		-											
	1443.61	3.96							-				
	1445.01	-	с	SPT	19 22	61		w, PI, Sv		ppm = 3.0 Temp. = 39 deg. Cels	sius. Consistenc	v of sandv	
		4.42			39				-	silt.		,,	
		-											
	1442.61	_ <b>5</b>											
		- 5.49											
		-	<b>D</b>	ерт	9	10				Temp. = 46 deg. Cels	sius. Consistend	cy of silty	
		- 5.94	D	371	13	40		W, FI, 3V		gravelly sand.			
	1441.61	-6											
		-								Lost circulation into fo	ormation.		
		-											
	1440.61	+7 1.01			9				-	Mainly very soft with t	thin zones of sli	ghtly hard	
		7 47	E	SPT	4	12		w, PI, Sv		material - poor recove	ery.		
		-							1		nuə		
11/01		-											
λT 5/	1439.61	+8											
T.GD		F											
DO		8.53			6				-	Door room in ceft	motorial		
N N		L	F	SPT	9	16		w, PI, Sv		Temp. = 55 deg. Cels	material. sius		
D.GP	1438.61	<del>9</del> 8.99			7				-				
9015		-											
007		F											
DOT													
N													

						. 9/	1/99			EXPLORATION LOG			
				S	FART DATE	<u> </u>	1/00					400 74 10	SHEET 2 OF 2
				Eſ	ND DATE		1-580	 Freeway F	vtensio	n Project	STATION	136+/1 "P"	
				JC	DB DESCRI	PTION W	ashoe (		vada		OFFSET	MG	
	22			LC	DCATION	13	86+70	oounty, Nov	uuu			Acker	
	× A			BO	ORING		070_01_	5			OPERATOR	Peterson	
	1 miles			E.	A. #	1/	17 61 (	5 m)		DATE DEPTH m ELEV. m	DRILLING		
				G	ROUND EL	EV	F .01 (	nn 2000 - Cath		9/1/99 NE	METHOD		0/15/1000
				H	AMMER DR	OP SYS	STEM		eau_		BACKFILLED	DA	TE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		10.06	G	SPT	1	2		w. PL Sv		Extremely soft format	ion - no recover	ry. Drilled	
		- 10.52			2			,,		Temp. = 62 deg. Cels	sius		
	1436.61	-11											
		-											
		11.58											
		- 11.90	н	SPT	15	40				Extremely soft format	ion - no recover	ry. Drilled	
	1435.61	-12			40				-	Temp. = 65 deg. Cels	in 10 seconds. sius		
		-								Slightly bard, highly y	ariable dark ar	av Sinter	
		-								Clightly hard, highly v	anabic, dan gr		
		_											
	1434 61	-1312 11											
		-			48				-	Soft zones of chalky	white material.		
		13.56	I	SPT	15 30/51	30/51				Temp. = 62 deg. Cels	sius		
		-											
	1/33 61	<u> </u>											
	1400.01	- "											
		-											
		-											
	1422 61	15											
	1432.01	15											
		_											
		-											
		-											
	1431.61	-16											
		_											
		-											
		-											
	1430.61	+17											
Ĺ		_											
/11/0		-											
JT 5,	1429.61	+18											
DT.GI		Ĺ											
		Ĺ											
Z Z		-											
5D.G	1428.61	-19											
7901{		-											
T 00		[											
.0D		_											
ź													

Γ							۵/	5/00			EXPLORATION LOG			
					ST	FART DATE	=	5/00						SHEET 1 OF 1
					El	ND DATE	9/	5/00	 		n Droiget	STATION	136+70	
					JC	DB DESCRI		1-560		xtensio		OFFSET		
	-sm				LC	DCATION		asnoe (	Jounty, Nev	ada		ENGINEER		re 702D-I C
	2 Mr	6	<b>`</b>		BC	ORING	13	36+700	_			EQUIPMENT	Tim A	16732D-LO
	Ą		7		E.	A. #	0	079-01-8	<b>D</b>		GROUNDWATER LEVEL			
	Ĭu	~			GI	ROUND EL	.EV14	47.55 (	<u>m)</u>		9/5/00 NE	METHOD	N/A	
					HA	AMMER DF	ROP SYS	STEM	J/A			BACKFILLED	_YesD	ATE9/5/2000
F	ELEV. (m)	DEP (m	TH -	SAI NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last 300 mm	Percent Recov/d	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		-								SC	Dense, brown, CLAY	ey sand.		
		_									Soft, red-brown to ora weathered, hydrother	inge-brown, cor mally altered,	npletely	
		-									VOLCANIC BEDROC	Κ.		_
-	1446.55 -	-1												Temp. = 52.3 deg. Celsius
		-												acg. colorad
		F												
-	1445.55 -	-2									2.13			
		-									Soft to moderately ha	rd, grey to light	grey,	
		2	2.59								sinter.	tely weathered,	1	
			2 00	А	GRAB				Chem		2.00			
	1444.55 -	-3									2.50			
		-												
		-												
		-												
	1443 55 -	<b>_</b> 4												
	1110.00	F.												
		-												
		-												
	1440 55 -	-												
	1442.33	5												
		-												
		-												
		-												
	1441.55 -	-6												
		E												
		F												
		-												
1	1440.55 -	-7												
		Ľ												
		L												
11/01		-												
T 5/	1439.55 -	-8												
T.GD		F												
DO		Ľ												
х Г		F												
D.GP	1438.55 -	-9												
9015		-												
007		F												
DOT		Ľ												
≥Ľ														

ſ							o//	5/00			EXPLORATION LOG			
					ST	FART DATI	=	5/00						SHEET 1 OF 1
					E١	ND DATE	9/:	0/00		vto !	n Drojaat	STATION	136+70	
					JC	DB DESCR	IPTION	1-580	Freeway E	xtensic	n Project	OFFSET	<u>10 L I</u>	
	.tm				LC	OCATION		ashoe (	County, Nev	ada		ENGINEER	JRU Jahn Daar	7020 1 0
	M.	er.			BC	ORING	13	6+70L		r		EQUIPMENT	John Deel	e 792D-LC
	MA				E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL	OPERATOR	A.	
	ž				GI	ROUND EL	EV14	47.31 (	m)		DATE DEPTH m ELEV. m	METHOD	N/A	
				1	HA	AMMER DF	ROP SYS		I/A		9/3/00 NL	BACKFILLED	Yes D	ATE 9/5/2000
ŀ	ELEV.	DEPT	гн -	SAI NO.	MPLE TYPE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
	(11)	(11)				Increments	300 mm	Recovid		SC	0.21 Dense, brown, CLAY	EY SAND.		
											Soft, orange-brown to	pale white (hig	jhly	
		_									hydrothermally altere	d, <b>VOLCANIC</b>		
		-									BEDROCK.			Temp. = 34.3
	1446.31	+1												deg. Celsius
		-												
		_												
	1445.31	+2 2	.13											
		-		А	GRAB				Chem	1				
		_ 2	.44								2.44			
		Ľ												
	1444.31	-3												
		-												
		-												
		-												
		-												
	1443.31	-4												
		_												
		-												
		-												
	1442.31	-5												
		-												
		_												
	1441.31	-6												
		-												
		-												
	1440.31	-7												
		_												
		-												
6		-												
5/11/	1420.04	⊥.												
Ъ	1439.31	B												
OT.C		_												
⊇ ≥		-												
- Lď		-												
15D.G	1438.31	-9												
7901														
1 00		_												
/_DC		_												
ź						l								

						/۱	5/00			EXPLORATION LOG			
				S	FART DATE	<u> </u>	5/00					400 70	SHEET 1 OF 1
				El	ND DATE		1-580	Ereeway E	vtoncio	n Project	STATION	136+70 10 PT	
				JC	DB DESCRI	PTION	2500-1 25000		vada		OFFSET		
	24			LC	DCATION	12			aua		ENGINEER	John Dee	re 792D-I C
	W.W.W			B	ORING	0						Tim A.	
	1			E.	A. #		A7 EE (	) m)		DATE DEPTH m ELEVEL	DRILLING	NI/A	
	Ve			G	ROUND EL	EV14	47.55 (	[[]) 1/A		9/5/00 NE	METHOD	N/A	0/5/2000
			N	H	AMMER DR	OP SYS		I/A			BACKFILLED	_resD	ATE
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_								Moderately hard to so	oft, light grey to	pale	
		-								plink-grey, completely	weathered, <b>Si</b>		
		-											
	1 4 4 6 5 5	-											Temp. = 68.9
	1440.55 -												deg. Celsius
		-											
		-											
		-											
	1445.55 -	-2											
		_ 2.44											
		2.74	A	GRAE				Chem		2.74			
		-											
	1444.55 -	-3											
		_											
		-											
		-											
	1443.55 -	4											
		_											
		-											
		-											
	1442.55 -	-5											
		-											
		-											
	1441.55 -	-6											
		-											
		-											
	1440.55 -	-7											
		_											
11/01		-											
DT 5/	1439.55 -	-8											
JT.GL		-											
V_DC		_											
N Cc		-											
5D.GF	1438.55 -	-9											
79015		-											
T 00.		-											
DO		_											
N													

							. 10	)/6/00			EXPLORATION LOG			0
					ST		10	)/6/00					407.00	SHEET 1 OF 1
					EN	ND DATE		1_F00		vtenci	n Project	STATION	137+00	
					JC	B DESCRI	PTION	1-000		vodo		OFFSET		
	- Ann				LC	OCATION		27,00	County, Nev	aua		ENGINEER	Komatsu F	C220
	× v		)		BC	ORING			F				Harry	
	The second second second second second second second second second second second second second second second se				E.,	A. #		12 00 /	(m)		DATE DEPTH m ELEV. m	DRILLING	NI/A	
	le				GF	ROUND EL	EV	142.00 (	(III) 		10/6/00 NE	METHOD	N/A	10/6/2000
					HA	AMMER DR	OP SYS	STEM	N/A			BACKFILLED	DA	TE10/6/2000
	ELEV. (m)	DEPT (m)	ГН	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DES	SCRIPTION		REMARKS
		0	.00 .61	AA	GRAB				SV, PI	SM	SILTY SAND with GRA to brown, dry to slightly 20% low plastic fines, 3 30% fine to coarse, sul	<b>VEL (FILL)</b> lig y moist, very do 50% fine to co bangular to sul	ht brown ense, with arse sand, bround	
		-									gravel to +50mm.			
	1441.00	+-1 - - - 1	83								CLAYEY SAND with G brown to dark grey, mo estimated 30-45% med 50-60% fine to coarse coarse, subangular to s	RAVEL (FILL) bist, dense, wit dium plastic fin sand, 10-20% subround grav	dark h es, fine to el to	
	1440.00	-2								sc	+2011111.			
		-		А	GRAB				SV, PI					
		_ 2	.44							_				
		-									0.05			
	1439.00	-3									POORLY GRADED SA	ND with SILT	and	
											GRAVEL dark olive bro with estimated 10% po	own, moist, ver	y dense, 70% fine	
		- 3	.66							_	to coarse sand, 20% fi	ne to coarse, s	ubround	
		-		B					SV/ DI		gravel to +/5mm. Cobl comprise approximatel	bles to +200m ly 5% of soil m	m ass.	
	1438.00	4	.27	D	GRAD				5V, PI					
		-								1				
		-								SP SM				
		-												
	1437.00	-5												
		- 5	.49											
		-								1				
		-		С	GRAB									
	1436.00	<b>6</b> 6	.10								6.10			
		-												
		-												
	1435.00	-7												
-		-												
/11/0		-												
DT 5	1434.00	-8												
DT.G		_												
		-												
N Ld		F												
5D.G	1433.00	-9												
7901		Ľ												
<b>JT 00</b>		$\vdash$												
V_DC		-												
z		1						1	1		l			

					-		_ a/·	15/00			EXPLO	ORATIO	N LOG			0. IF
					ST		= <u> </u>	15/00							407.00 "	SHEET 1 OF 3
					E			1.5,33	Freeway F	vtonci	on Proier	∽t		STATION	13/+22 "I	<b>پ</b>
					JC	DB DESCRI	PTION			vada		<i></i>		OFFSET	<u> </u>	
	, here				LC	DCATION		asilue (	Journy, Nev	aud				ENGINEER	Acker	
	2 Mar				BC	DRING		7 - 04							Peterson	
	G.				E.	A. #		79-01-5	, ,							
	te	7			GI	ROUND EL	EV14	56.24 (	m)	<u> </u>	9/15/99	NE		METHOD	HQ Core	
					HA	AMMER DR	OP SYS	STEM	Rope - Cathe	ead				BACKFILLED	_YesD	ATE9/15/1999
	ELEV. (m)	DEPT (m)	Ή	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	ESCRIPTION		REMARKS
		-										Variably c close frac <b>Hydrothe</b> the prope	colored, very tured, comp <b>rmally Alter</b> rties of a Si	y soft to soft, clo bletely weathere r <b>ed Bedrock</b> . Ur Ity Gravelly San	ose to very d, nit exhibits d.	
	1455.24	<u>+</u> 1														
		- 1.	.52													
				А	SPT	10	32	90	w, PI, Sv							
	1454.24	<b>-</b> 2 ^{1.}	.98			22				_						
		-										Pale white	e, very soft	to approx. 9.5 fe	eet.	
		_ 2.	.44			19				-						
			00	В	SPT	21	43	90	w, PI, Sv		2.00					
	1453.24	-3	.90								2.90	Pale white	e to red and	I red brown, har	d, close to	
		-										very close	e fractured,	slightly weather	ed,	
		-										a transitio	n to hydroth	hermally altered	volcanic	
		- 3.	.66	B1					w, PI, Sv	-		bedrock w	vith a consis	stency of silty gr	avelly	
	4450.04	3.	.96								3.96	sano.				
	1452.24	4	27	С	SPT	25 50/76	50/76	75				Highly var	riable color,	moderately har	d to hard,	Temp. ~27
		-				00/10				-		Altered V	olcanic Bed	drock.	nermany	degrees C.
		-														
		-														
	1451.24	-5										Very soft moderate	to soft at 15 lv hard to 18	o-16 feet, then s 8 feet.	oft to	
			10										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
		- 5.	.49	C1					w, PI, Sv	-						
		-														
	1450.24	-6														
		F														
		F										Moderate	ly close to c	close fractured a	nt 20-23	
		[										feet.				
	1449.24	7.	.01			10				1						T
		- 7.	.32	D P1	SPT	50	50	75								degrees C.
		-							W, FI, SV							
/01		F										Very soft	to moderate	ely hard, modera	ately close	
5/11.	1448 24											to close fr	actured at 2	23 to 25 feet	-	
GDT	1-+0.24															
DOT.(		8	53													
NV_L				F	SPT	21	50/127	70	w. PL Sv	1						Temp. ~27
- L H		- 8.	.84	-	5.1	50/127	50/121			-						degrees C.
'9015D.C	1447.24	-9										Very soft Clayey Sa	to moderate and.	ely hard with pro	perties of a	
T 007		Ĺ										Hard, clos	se to very cl	lose fractured at	29.5 to 33	
DO_		F										feet.				
≥																

						/۵	15/00			EXPLORATION LOG	
				S	TART DATE	<u> </u>	15/99				SHEET 2 OF 3
				EI	ND DATE	9/	15/99			STATION	P"
				JC	DB DESCRI	IPTION	1-580		xtensic	OFFSET 7.94 RT	
	200			LC	DCATION			Jounty, Nev	ada	ENGINEER Acker	
	2WM	6		B	ORING		87+20			EQUIPMENT ACKE	
	<i>A</i>			E.	A. #	00	079-01-8	<b>D</b>		GROUNDWATER LEVEL OPERATOR	
	2			G	ROUND EL	EV14	56.24 (	m)		9/15/99 NE METHOD HQ Core	
		<b>\</b>	1	H	AMMER DR	ROP SYS	STEM	Rope - Cathe	ead	BACKFILLED Yes	DATE9/15/1999
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
	1445 24	- - -								Moderately hard to hard, close to very close fractured at 33 to 53 feet.	Temp. ~29 degrees C.
	1440.24	-									Temp. ~38 degrees C.
	1444.24									Very soft to soft	
	1443.24	- 									
	1442.24	- 14 - -								Soft to moderately hard at 43 to 46.5 feet.	
	1441.24	- 15 								15.24 Light grey to dark red brown (highly variable),	Temp. ~43 degrees C.
	1440.24	- 								moderately hard to hard, close to very close fractured, <b>Hydrothermally Altered</b> <b>Metasedimentary Bedrock</b> .	Temp - 49
	1439.24	- - - 								Soft to moderately hard at 53 to 58 feet.	degrees C.
NV_DOT.GDT 5/11/01	1438.24	- - 								Close fractured at 60 to 62 feet.	Temp. ~54 degrees C.
NV_DOT 0079015D.GPJ	1437.24	- 									Temp. ~54 degrees C.

						. a/·	15/00			EXPLOR	ATIO	N LOG			
				S	FART DATE	<u> </u>	15/00								SHEET 3 OF 3
				E	ND DATE		15/99	 Eroowov E	vtonoio	n Droigot			STATION	137+22 "H	)"
				JC	DB DESCRI	PTION	1-000		vodo	пгюјест			OFFSET	1.94 K I	
	- San			LC	DCATION	10		Journy, Nev	aua				ENGINEER	Acker	
	A AN			BC	ORING		7 01 1		[					Peterson	
	4			E.	A. #		79-01-5	)			PTH m	ELEVEL	DRILLING		
	1			GI	ROUND EL	EV. <u>14</u>	56.24 (	m)	[	9/15/99	NE		METHOD	HQ Core	0/45/4000
				HA	AMMER DR	OP SYS	STEM	ope - Cathe	ead				BACKFILLED	resD	ATE
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATE	ERIAL DE	SCRIPTION		REMARKS
		_								Hig	ghly var	iable, locali	zed hardness (s	soft to hard)	
		-								20.57 Out	t this in	terval.	y close nacium	ng mough	Tomp 66
		-								20.57					degrees C.
	1/35 2/	-21													
	1400.24	_													
		-													
		-													
	1434 24	- 22													
	1 10 1.2 1	_													
		-													
		-													
	1433 24	-23													
		-													
		-													
		-													
	1432 24	-24													
		-													
		-													
		-													
	1431.24	-25													
		-													
		-													
		-													
	1430.24	-26													
		-													
		-													
	1429.24	-27													
		-													
		-													
/01		-													
5/11	1428.24	-28													
GDT															
DOT		-													
N		E													
.GPJ	1427.24	-29													
<del>3</del> 015E	/	-													
3200		F													
DOT		Ľ													
N															

						/۵	5/00			EXPL	ORATIO	N LOG			
				S	TART DATE	<u> </u>	5/00								SHEET 1 OF 1
				El	ND DATE	- 9/3		 Eroowov E	vtonoic	n Droio	<b>.</b> +		STATION	137+20	
				JC	DB DESCRI	PTION	1-000		xtensic	ITFIOJEC	JL		OFFSET		
	- Sam-			LC	DCATION			Jounty, Nev	aua				ENGINEER		ro 792D-I C
	2 Mr. M			B	ORING	13	7+200	-	I					Tim A.	
	4 m			E.	A. #		79-01-5	)				ELEVEL	DRILLING		
	2e			G	ROUND EL	EV14	55.87 (	m)		9/5/00	NE		METHOD	<u>N/A</u>	
			N	H	AMMER DR	OP SYS		I/A					BACKFILLED	Yes D	ATE9/5/2000
	ELEV.	DEPTH	SA	MPLE	BLOW CO	OUNT Last	Percent	LAB TESTS	USCS		ΜΔΤΙ		SCRIPTION		REMARKS
	(m)	(m)	NO.	TYPE	Increments	300 mm	Recov'd		Group		Medium d	ense brow			
		-							SC	0.30					
		Ľ									Soft, light weathered	grey to pal	e white, comple rmally altered,	tely	
		_									VOLCAN	C BEDROC	K		
	1454.87	-1													
		-													Temp. = 41.2
															deg. Celsius
		_													
	1453.87	-2													
		-													
		_													
		_													
	1452.87	-3								3.05	Madavatal	h i h a nal ta h	and male winds a		
		-									SINTER.	ly nard to n	ard, pale plnk-g	rey,	
		3.66	5												
		- 0.00	A	GRAE	3			Chem	-	0.00					
	1451.87	-4	<u>&gt;</u>							3.90					
		-													
		_													
	1450.87	-5													
		_													
		_													
	1449.87	-6													
		_													
		-													
	1448.87	-7													
-		_													
/11/0		-													
DT 5.	1447.87	-8													
DT.GI		Ľ													
		_													
N Ld		-													
5D.G	1446.87	-9													
7901		Ĺ													
DT 0(		-													
		-													
Z		1	1	1	1	1	1	1	1	1					1

					_		Q//	5/00			EXPLORATION LOG			
					S	TART DATE	<u> </u>	5/00						SHEET 1 OF 1
					El	ND DATE		1 520	Erooway E	vtonci	n Project	STATION	137+20	
					JC	DB DESCRI	PTION			xiensi		OFFSET		
	- Sm				LC	DCATION			Journey, Nev	aua		ENGINEER		re 792D-I C
	5 Mm	6	5		B	ORING		7+20L	-				Tim A.	
	T.	$\sum$			E.	A. #		079-01-5	<u>,</u>		GROUNDWATER LEVEL	DRILLING		
	2	~			G	ROUND EL	EV14	55.28 (	m)		9/5/00 NE	METHOD	N/A	
			$\overline{)}$		H	AMMER DF	ROP SYS		I/A			BACKFILLED	_YesC	ATE9/5/2000
	ELEV. (m)	DE (I	PTH m)	SAI NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		_								SC	Medium dense, browr	n, CLAYEY SAI	ND	
		-									Moderately hard to ha	rd, light grey to	dark	_
		-									red-brown, hydrotherr	nally altered, S	INTER.	
	4454.00	-												Tomp - 51 1
	1454.28 -	-1												deg. Celsius
		_												
		-												
		-												
	1453.28 -	-2												
		-	0.74											
		-	2.74	^					Cham	_				
	1452.28 -	-3	3.05	A	GRAE				Chem		3.05			
		-												
		_												
	1451.28 -	-4												
		-												
		-												
	1450.28 -	-5												
		-												
		-												
	1449.28 -	6												
		-												
		-												
		-												
	1440.00	- 7												
	1440.20	Γ'												
		-												
5		-												
/11/0		-												
DT 5	1447.28 -	-8												
OT.G		Ľ												
		-												
Z G		F												
5D.G	1446.28 -	-9												
7901		F												
Т 00		Ľ												
Ö		Ļ												
≥́														

						0/	5/00			EXPL	ORATIO	N LOG			
				ST	TART DATE	<u> </u>	5/00								SHEET 1 OF 1
				E١	ND DATE	9/:	5/00			- Desis			STATION	137+20	
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensic	on Projec	21		OFFSET	<u>10 R I</u>	
	. Day			LC	OCATION		ashoe (	County, Nev	ada				ENGINEER	JRU John Doo	ro 702D L C
	- Mar			BC	ORING	13	87+20R						EQUIPMENT	John Dee	re 792D-LC
	1 A			E.	A. #	00	79-01-5	5		GROU	NDWATER		OPERATOR	A.	
	n an			GI	ROUND EL	EV14	56.55 (	m)		DATE 9/5/00		ELEV. m	METHOD	N/A	
			1	HA	AMMER DR	OP SYS	STEM_N	I/A		5/5/00			BACKFILLED	Yes	ATE 9/5/2000
		0.000	SA	MPLE	BLOW C	OUNT									
	ELEV. (m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		ΜΑΤΙ	ERIAL DE	ESCRIPTION		REMARKS
		_							60		Loose to r	medium de	nse, brown, <b>CL</b>	AYEY	
		-							30	0.46	SAND.				
		-									Soft to mo	derately ha	ard, orange-brow	wn to	
		-									hydrotheri	mally altere	d, VOLCANIC	,	
	1455.55	+1									BEDROCI	K			
		_													Temp. = 33.5
		-													deg. Celsius
	1454.55	-2													
		-													
		-													
	1453.55	-3								3.05					
		-									Moderatel	y hard to h	ard, light grey to	o pale P	
		-									pink, nyui	othermany		ν.	
		-													
	1452.55	L,													
	1452.55	-													
		4.57													
		- 4.57	^	CDAR				Chom	-						
		- 4.88	~	GRAD				Chem		4.88					-
	1451.55	<u></u> 5													
		_													
		-													
		-													
	1450.55	-6													
		Ľ													
		L													
		-													
	1449.55	+7													
		-													
		t													
1/01		Ľ													
- 5/1	1448.55	-8													
GDT		-													
DOT		-													
N		-													
GPJ	1117 55	Ĺ													
115D.	1447.05	-9													
0290		F													
OT C		-													
		-													
NV_D(		_													

				-		- 8/	31/99			EXPLO	ORATION	N LOG			
				S		<u> </u>	1/99						4.0		SHEET 1 OF 1
				E	ND DATE		1,33	Ereeway E	vtoncio	n Proioc	<b>`</b> +		STATION	37+60 "P"	
				JC	DB DESCRI	IPTION	1-500		xiensio	ITFIOJEC	<i>,</i> L		OFFSETM	<u>.72 LI</u> G	
	544			LC	DCATION		ashoe	Jounty, Nev	aua				ENGINEER	cker	
	2Wml	6		B	ORING		37+60		[					eterson	
	Ä			E.	A. #	00	079-01-8	5		GROU					
	ž.			G	ROUND EL	EV14	61.05 (	m)	F	9/1/99	NF	ELEV. M	METHOD	Q Core	
			1	H.	AMMER DR	ROP SYS	STEM_F	Rope - Cath	ead	0/ 1/00			BACKFILLED Y	es dat	E 9/15/1999
		DEDTU	SA	MPLE	BLOW C	QUNT	_		11808						
	(m)	(m)	NO.	TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	Group		MAIL	ERIAL DE	SCRIPTION		REMARKS
		_									Hard, brittl	le, grey bro	wn Sinter.		
		-													
		-													
		-													
	1460.05 ·	-1													
										4.50					
		- 1.52	2		10					1.52	Verv stiff t	o hard, tan	brown to arev		
		-	A	SPT	15	31		w, PI, Sv			Hydrother	mal Clayey	Sand with sinter		
	1459.05	- <u>1.98</u>	3		16				-		fragments	and 45% r	high plastic fines.		
		-									Hard sinte	er 0.3 meter	s thick.		
		_ 2.44	•		9				-		Temp. = 2	7 deg. Cels	sius		
		-	В	SPT	35	50/76		w, PI, Sv							
	1/58 05	- 2.90	)		50/76					2.90	Hard britt	le hiahly fr	actured tan to red S	Sinter	
	1430.05	5									nara, ona	ie, inginy in			
		_													
		-													
		3.96	5												
	1457.05	4 4.11	С	SPT	50/51	50/51									
		-													
		_									Few thin s	oft zones.			
	1456.05	-5													
		-													
		-													
		-													
	1455.05	e													
	1455.05	_ <b>o</b>													
		L													
		6.71													
		- 6.86	6 D	SPT	50/102	50/102		w, PI, Sv			Vertically of	orientated z	zones of tan to red h	nigh	
	1454.05	-7									plastic cla	у.			
		-													
		-													
1/01											Whitish pi	nk sandy c	ay 0.3 meters thick.		
5/1,	1453.05	-8													
GDT	1.00.00	Ļ									<b>-</b>				
.TOC		F									Slightly ha	ard, purple,	hydrothermally alter	red	
N											a.onai.				
- L H E		- 8.84	E					w, PI, Sv	-						
5D.G	1452.05	9 9.14	۱								_				
7901			F	SPT	6	20					Consisten	cy of high p	plastic clayey sand v	with	
Т 00		9.60	)	ļ	11					9.60	Temp. $= 2$	7 deg. Cels	sius		
DO		L													
Ş															

						8/	29/98			EXPL	ORATIO	N LOG			
				S	TART DATE	0//	29/90								SHEET 1 OF 1
				EI	ND DATE	0/.	1 500	Eroowov E	vtonoic	n Droio	<b>.</b> +		STATION	<u>137+85 "P"</u>	
				JC	DB DESCRI	PTION	1-500		xtensic	in Flojec	<i>.</i>		OFFSET	10.80 LT	
	- Arr			LC	OCATION	10		Journy, Nev	aua				ENGINEER	Acker	
	SWW N			B	ORING			_	[	00011				Peterson	
	1 m			E.	.A. #		019-01-0	)				FLEVEL	DRILLING	110.0270	
	20			G	ROUND EL	EV14	62.59 (	m) Nama Oathu		8/29/98	NE		METHOD	HQ Core	0/00/4000
			N	H	AMMER DR	OP SYS	STEM _	tope - Cathe	ead				BACKFILLED	YesDAT	re <u>8/29/1998</u>
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW CO 150 mm Increments	DUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		0.00	2								Soft to mo	derately ha altered, sili	ird, variable col ca replaced <b>Be</b>	ored, drock,	
		-									undiscern	ible. Unit co	ontains zones of	fSinter	
			A								ueposits.				
	1461.59	-1													
		-													
		- 1.52	2						_						
		_									Clay sean	n.			
	1460.59	-2													
		-	в												
		-													
		_													
	1459.59	<b>3</b> 3.05								3.05					
		-													
		-													
	1458.59	-4													
		-													
		-													
	1457.59	-5													
		-													
		-													
	1456.59	-6													
		-													
		_													
	1455.59	-7													
		-													
1/01		_													
T 5/1	1454.59	-8													
T.GD		-													
DO		Ľ													
NN F.		Ļ													
D.GP	1453.59	-9													
9015		-													
T 007		-													
6 D		L													
2															

				-		- 8/	28/98			EXPLORATION LOG					
				S		= <u> </u>	20/08					400.00 "	SHEET 1 OF 2		
				E	ND DATE		1-580	Freeway F	vtoncia	n Project	STATION	139+39 "F			
				JC	DB DESCRI	PTION	2500-1 25000		vada		OFFSET	MG			
	- An			LC	DCATION	12			aua			Acker			
	W			B	ORING		70 01 6					Peterson			
	1			E.	A. #		70 20 (	m)		DATE DEPTH m ELEV. m	DRILLING				
	Ve			G	ROUND EL	EV14	19.20 (	III) Dana Cath		8/29/98 NE	METHOD		9/20/1008		
				H	AMMER DR	OP SYS	STEM	tope - Calin	eau		BACKFILLED	D/	ATE 0/29/1990		
	ELEV.	DEPTH	SA		BLOW CO 150 mm	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DE	SCRIPTION		REMARKS		
	(m)	(m) 0.00	140.		Increments	<u>300 mm</u>	Recov'd			Hard, brittle, multicolo	ored. slightly fra	ctured			
										Sinter Deposits. Infre	equent soft clay	zones.			
			А												
		-													
	1478.28 -	1 1.07							-						
		-													
		-	в												
	1477.28 -	-2													
		-													
		2.59													
		-													
	1476.28	-3													
		-	С												
			Ŭ												
		-													
	1475.28 -	4 4.11													
		-													
		_								0.4	40 50 4				
		-	П							Soft zone - no recove	ery 4.6 - 5.2 met	ers.			
	1474.28 -	-5													
		-													
		_ 5.64													
		-													
	1473.28 -	-6													
			F							Soft zone - no recove	ry 5.9 - 6.6 met	ers.			
		_													
		-													
	1472.28 -	7 7.16													
Ę		_													
/11/0		-	F												
DT 5,	1471.28 -	-8													
DT.G															
N_D(		- 8.69													
A L4		-							]						
15D.G	1470.28 -	-9													
10670		_													
DT 0(		-	G												
		-													
Z		1	1	1	1	1	1	1	1	1					
						o /•	20/00			EXPLOF	RATIO	N LOG			
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				ST	FART DATE	0//	20/90								SHEET 2 OF 2
				El	ND DATE	8/.	29/98			Ducie of			STATION	139+39 "P	"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project			OFFSET	<u>86.14 RT</u>	
				LC	OCATION		ashoe (	County, Nev	/ada				ENGINEER	NG	
	-2MM	0		BC	ORING	13	89+50						EQUIPMENT	Peterson	
	Ä			E.	A. #	00	79-01-5	5		GROUNE	DWATER			1 6(613011	
	Že			GI	ROUND EL	EV14	79.28 (	m)		DATE DI 8/29/98	NF	ELEV. m	METHOD	HQ Core	
			•	H	AMMER DR		STEMR	Rope - Cathe	ead				BACKFILLED	_YesDA	TE 8/29/1998
	ELEV. (m)	DEPTH (m)	NO.	MPLE TYPE	150 mm Increments	Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MATI	ERIAL DE	ESCRIPTION		REMARKS
		10.21							-						
		-													
		-													
	1468 28 -	11	н												
	1400.20	-													
		_													
		- 11.73													
	4 407 00	- 10													
	1467.28 -	- 12	I												
		12.34							-						
		_													
		-	J							SI	hattered	zone.			
	1466.28 -	-13									nationed	20110.			
		- 13.20							-						
		_													
		_													
	1465.28 -	- 14	к												
		-													
		-													
		14.78							4						
	1464.28 -	- 15								S	oft clay (	0.5 meters	thick.		
		-													
		-						W PL SV							
								w, i i, ov							
	1463.28 -														
		16.31													
		-	N/						]	16.46	lot oct	light group	hudrothormal A		
		16.76	IVI								eposits.	ngrit grey,	nyurumermai Ci	ay	
	1462.28 -	-17													
									СН						
		17.37	N O	-				w, PI, Sv	-						
01		47.00								17 00					
5/11/	1464.00	10								Te	emp. = 8	36 deg. F			
3DT	1401.20 -	- 10										2			
OT.C		-													
NV_C		-													
I L L L		F													
15D.C	1460.28 -	19													
10670															
<u>ЭТ 0(</u>		F													
		-													
ź							L		1	1					

							8/	28/08			EXPLORATION LOG			
					ST		<u> </u>	28/98					444 04 15	SHEET 1 OF 1
			)		EN	ND DATE		1-280	Freeway F	vtonsia	n Project	STATION	141+01 "H	<b>,</b>
					JC	DB DESCRI	PTION W	2000-1-000		vada		OFFSET	MG	
	14	ile.			LC	DCATION	1/	1+00	Sounty, Nev	aua			Acker	
	Nr 14	è	3		BC	DRING		70_01_4	5	[		OPERATOR	Peterson	
	1				E.	A. #	1/	57 93 (	m)		DATE DEPTH m ELEV. m	DRILLING	Auger	
					GI		EV	R	nne - Cathe		8/28/98 NE	METHOD	Yes a	8/28/1998
		\			H/		OP SYS	SIEM				BACKFILLED	<u> </u>	ATE
	ELEV. (m)	DEF (n	PTH n)	NO.	MPLE TYPE	BLOW Co 150 mm Increments	JUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group			rad to	REMARKS
		-	0.00	А	SPT	27	69				shattered Sinter Depo	osits.	eu io	taken from 0 -
			0.46			42				-				1.5 meters.
	1456.93 -	-1												
		-												
			1.52	B	SPT	50/0	50/0				1.52	ougor		
		_	1.00	D	JF I	30/0	30/0			-	Complete refusal with	auger.		
	1455.93 -	-2												
		-												
		-												
	1454.93 -	-3												
		-												
		-												
	1453.93 -	-4												
		-												
		-												
	1452.93 -	-5												
		-												
		-												
	1451.93 -	-6												
		-												
		_												
	1450.93 -	-7												
		-												
11/01		_												
T 5/'	1449.93 -	-8												
T.GD		F												
/_DO														
N L		F												
SD.GF	1448.93 -	-9												
79015		F												
T 007		Ľ												
DO		F												
ź								1						

						<u>م</u> /	28/08			EXPLORATION LOG			<b>..</b>
				S		<u>0/</u> 8/	28/98						SHEET 1 OF 1
				E	ND DATE		1-280	Freeway F	vteneir	n Project	STATION	142+51 "P	,
				JC	DB DESCRI	PTION	ashoa (		vada		OFFSET		
	A.			LC	DCATION		12+50		aua		ENGINEER	Acker	
	Nr. W			B(	ORING		170_01_4	5			OPERATOR F	Peterson	
	1 miles			E.	.A. #	1/	158 28 (	(m)		DATE DEPTH m ELEV. m	DRILLING	Auger	
	V			G		EV	F	Rone - Cath	ead	8/28/98 NE	METHOD	Yes -	8/28/1998
				H			SIEM				BACKFILLED	D/	ATE
	ELEV. (m)	DEPTH (m)	NO.		BLOW Co 150 mm Increments	UNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION		REMARKS
		0.00	A	SPT	4	10				composed of excavat	ed Sinter deposits	<b>m</b> 5.	taken from 0 -
		- 0.46	5		6				-				1.5 meters.
	1457.28	-1											
		-								1.22 Slightly hard to mode	rately hard. brittle.	white	
		1.52	2		/1				-	to grey Sinter Deposition	its.		
		_ 1.83	В	MC	50	50		w, PI, Sv					
	1456.28	-2											
		-											
		-											
	1455.28	- <u>3</u> 3.05		CDT	50/25	50/25			-				
		0.20		351	50/25	50/25			1				
		3.66								3.66			
		-								Complete refusal with	n auger.		
	1454.28	-4											
		-											
		F											
		-											
	1453.28	-5											
		-											
		-											
	1452.28	-6											
		-											
	1451.28	-7											
_		-											
/11/0		-											
DT 5.	1450.28	-8											
DT.GI		Ĺ											
ND		-											
L N		-											
5D.G	1449.28	-9											
17901		Ĺ											
<u>ЭТ 0С</u>		-											
		-											
z		1	1	1	1		1	1	1	1			

							. 11	/13/98			EXPLORATION	N LOG			
					ST		<u>''</u> = 11	/13/98						4.40.00 "	SHEET 1 OF 1
					EN			1-580	Freeway F	xtensio	on Project		STATION	121 84 P	<b>-</b>
					JC	BDESCRI	PTION W	ashoe (	County Nev	vada			OFFSET	MG	
	44	all and a second second second second second second second second second second second second second second se			LC	CATION	14	3+00	o o unity, i to t	uuu				Acker	
	× ×				BC	DRING		79-01-	5	[	GROUNDWATER		OPERATOR	Peterson	
	1				E./	4.#	14	48 06 (	(m)		DATE DEPTH m	ELEV. m	DRILLING	Auger	
					GF				Rope - Cath	ead	11/13/98 NE			Yes	ATE 11/13/1998
													BACKFILLED	D	ATE
	ELEV.	DEPTH		<u>5AN</u> 0.	IPLE TYPE	BLOW C 150 mm	Last	Percent	LAB TESTS	USCS Group	MATE	ERIAL DE	ESCRIPTION		REMARKS
	(11)	0.0	00			2	<u>300 mm</u>	Recova			Slightly ha	ard to mode	rately hard, brit	tle,	Bulk sample
		0.4	4 16	•A	SPT	5 16	21		w, PI, Sv		whitish ora	ange <b>Sinte</b> r	·.		taken from 0 - 1.5 meters.
		-													
		-													
	1447.06	<u>+</u> 1													
		1 - 1 -	52												
		- 1.6	58 4	в	SPT	50/102	50/102		w, PI, Sv						
		-													
	1446.06	<u>+</u> 2													
		-													
		-													
		- 2.9	90	_	CDT	E0/0	E0/0		W DL Sv	_	2.05				
	1445.06	-3 3.0	5 4	5	371	50/0	50/0		W, PI, SV		3.03				
		-													
		-													
		F .													
	1444.06	4													
		-													
		-													
	1443.06														
	1443.00	_ <b>5</b>													
		-													
		-													
	1442.06	6													
	1442.00	-													
		-													
		-													
	1441.06	<b>_</b> 7													
	1441.00	<b>[</b> '													
		-													
01		-													
5/11/	1 4 4 0 0 0	-													
GDT	1440.06	<b>T</b> 8													
DOT.0		-													
		-													
GPJ	1 400 00														
15D.	1439.06	[−] 9													
0670C		-													
) T (		-													
		F													

					_		Q/	27/98			EXPLORATION LOG		
					S		= <u>-0/</u> . 8/	27/98					SHEET 1 OF 1
					13 			I-580	Freeway F	xtensio	n Proiect	STATION 144+01 "I	-
					JC	DB DESCRI	PTION	ashoa (		vada		OFFSET <u>5.95 KT</u>	
	22	iles.			LC	DCATION	1/			aua		ENGINEER	
	Nr. Way		)		B	ORING		70_01_4	5			OPERATOR Peterson	
	1				E.	A. #	1/	150 15 (	(m)		DATE DEPTH m ELEV. m	DRILLING Auger	
	Ve				G	ROUND EL	EV	150.45 (	nn Rona Cath		8/27/98 NE	METHOD Auger	8/27/1008
			//		H	AMMER DR	ROP SYS	STEM				BACKFILLEDE	DATE
	ELEV. (m)	DEPT (m)	ГН -	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		SCRIPTION	REMARKS
		- 0	.00 .30	А	SPT	37	37				Soft to slightly hard, t	brittle, light brown to grey	taken at 0 - 1.5
		-											meters.
		Ľ											
	1449.45	-1											
		-											
		- 1	.52										
		1	.83	В	SPT	41 53/51	53/51		w, PI, Sv				
	1448.45	-2											
		F											
		-											
		-											
	1447.45	_ _{3 3}	.05								3.05		
		-		C	срт	7	24		W DI SV		Moist, very stiff, light	grey to white,	
		- 3	.51	C	JF I	13	24		w, F1, 3v		medium plastic fines,	30% fine sand.	
		-									Interbedded weathere	ed DG sand with fine	
	1446 45	4								CL	3.2.2.1		
		-											
		-									4 57		
		-											
	1445 45	-5											
		-											
		-											
		-											
	1444 45	-6											
	1444.45												
		-											
		-											
	1442.45	7											
	1445.45	-											
		-											
6		-											
5/11/	4 4 4 0 4 5	-											
DT	1442.45	8											
DT.C		F											
		F											
GPJ	A A A A	-											
15D.	1441.45	9											
06700		F											
0 TO		F											

						11	/13/08			EXPLORATION LOG			
				S	TART DATE	11	/13/90						SHEET 1 OF 1
				EI	ND DATE		/13/90	 		. Ducie of	STATION	144+12 "F	D"
				JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	on Project	OFFSET	95.48 L1	
	.tre			LC	OCATION		ashoe (	County, Nev	ada		ENGINEER	Advar	
	1 Mm	6		B	ORING	14	4+10			]	EQUIPMENT	Peterson	
	Ĩ,			E.	A. #	00	79-01-5	5		GROUNDWATER LEVEL		1 6(613011	
	i de			G	ROUND EL	EV14	53.46 (	m)		DATE DEPTH m ELEV. m 11/13/98 NF	METHOD	Auger	
		)		H	AMMER DR	OP SYS	STEMR	Rope - Cathe	ead		BACKFILLED	_YesD	ATE <u>11/13/1998</u>
	ELEV. (m)	DEPTH (m)	SAI NO.	MPLE TYPE	BLOW CO 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	ESCRIPTION		REMARKS
		0.00	1A	SPT	5	17		w. Pl. Sv		Slightly moist, mediu	m dense, brick i <b>/ Sand</b> with esti	red mated	Bulk sample taken from 0 -
		- 0.46			11					30-50% medium plas	tic fines, 50-709	% very fine	1.5 meters.
		-							SC	to coarse sand. High	y variable.		
	4 4 5 9 4 9												
	1452.46	<u> </u>								1.22			
		- 150								Moist, medium dense	e, greenish grey	Clayey	
		-			7				-	Deposits of clay fines	sting of Hydrothe with Sinter gra	ermai vel.	
		- 1.08	1B	SPT	11	28		w, PI, Sv			U		
	1451.46	-2-1.30			17				-				
		-							SC				
		_											
		_											
	1450.46	<b>3</b> 3.05											
		-	10	SPT	7	14		W PL SV					
		- 3.51	10		8	17		w, i i, ov		3.51			
		-											
	1440.46												
	1449.40	4											
		_											
		-											
		-											
	1448.46	-5											
		-											
		-											
	1447 46	-6											
	1111.10	_											
		_											
		-											
		-											
	1446.46	-7											
1/01		L											
- 5/1	1445.46	-8											
GDT		-											
DOT		-											
N		-											
GPJ	4 4 4 4 4 5												
15D.(	1444.46	9											
.06 <i>L</i> C		_											
<u>т</u> о(		-											
/_DC		-											
ź							1						

							11	/12/02			EXPLORATION LOG	
					S	TART DATE		/12/90				SHEET 1 OF 1
					EI	ND DATE		12/90	 	vtonoi	STATION	<u>8 "P"</u>
					JC	DB DESCRI	PTION	1-580	Freeway E	xtensi	OFFSET 200.4	<u>8 R I</u>
					LC	OCATION		ashoe	County, Nev	ada	ENGINEER	
	1 Mm				B	ORING	14	4+50				
	<i>A</i>	Ņ			E.	A. #	00	79-01-	5		GROUNDWATER LEVEL OPERATORO	
	Ŷ.				G	ROUND EL	EV14	42.64 (	m)		11/12/98 NE METHOD Auge	
			<u></u>	1	H.	AMMER DR	OP SYS		lope - Cathe	ead	BACKFILLED Yes	DATE11/12/1998
	ELEV.	1	DEPTH	SA		BLOW CO	OUNT Last	Percent	LAB TESTS	USCS	MATERIAL DESCRIPTION	REMARKS
	(11)	-	0.00	)		Increments 3	<u>300 mm</u>	Recov'd			Moist, medium dense, light brown <b>Clayey</b>	Bulk sample
			0.46	3A	SPT	8 19	27		w, PI, Sv		<b>Sand</b> with estimated 20% medium plastic	taken from 0 -
		-	0.10			10				SC	medium gravel.	1.5 meters.
		+									0.91	
	1441.64	+	1								Moist, very dense, brown grey Silty Gravelly	
		F									65% fine to coarse sand, 20% gravel to 2.5 c	m.
		F	1.52	!		12				_		
		-		3B	SPT	25	59		w, PI, Sv			
	1440.64	+	1.98 2			34				SM		
		-									Cobbley below 2 meters.	
		F										
		Ľ										
	1439.64	_	<b>3</b> 3.05									
		-	3.20	3C	SPT	50	50		w, PI, Sv		3.20 Refusal on gravels	
		-										
		F										
	1438 64		4									
	1100.01	-	•									
		╞										
		F										
	1407.04	F	F									
	1437.04	T	5									
		+										
		-										
		-										
	1436.64	+	6									
		-										
		+										
	1435.64	+	7									
		F										
11/01		F										
T 5/'	1434.64	+	8									
T.GD		F										
DO		F										
∧ ∩		Ľ										
O.GP.	1433.64	+	9									
90151		┝										
200		F										
DOT		Ľ										
N												

ſ							Q/-	1/90			EXPL	ORATIO	N LOG				
					ST		<u>9/</u>	1/99							444 66 "-	S⊦	IEET 1 OF 1
			)		E١	ND DATE		1/33		vtenci	n Proio	<b>`</b> †		STATION	144+96 "P	,"	
					JC	DB DESCRI	PTION	1-00U		xtensio	on Projec	л		OFFSET	110.88 LI		
	24				LC	OCATION				aua				ENGINEER	.ID 2001 C		
	2 Mart	6	5		BC	ORING		4+96 (\	//QB-7) -						-		
	I.				Ε.	A. #	00	079-01-5	<u>,</u>		GROU						
	Ve	<i>, , , , , , , , , ,</i>			GI	ROUND EL	EV14	44.71 (	m)		9/1/99	NE		METHOD	Trackhoe		
			1)		HA	AMMER DR	OP SYS	STEM	IA					BACKFILLED	_YesD	ATE	9/1/1999
ŀ	ELEV. (m)	DE (I	PTH m)	SAN NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		F	REMARKS
		_										Moist, me	dium dense	e, brown <b>Silty Sa</b>	and with		
		-	0.46									70% fine	to coarse s	and, and 15% fi	ne to		
		-	0 76	10A	GRAB					SM		coarse su	brounded t	o rounded grave	el. Unit		
		-	0.70							-		and scatte	ered wood a	and metal debris			
	1443.71	+1	1.22								1.07	Moist me	dium dense	a dark brown C	lavov		
		_		10B	GRAB				PI. Sv	-		Gravel wi	th Sand wit	th 16% low to m	edium		
		_	1.52						,	-		plasticity 1	fines, 38% to coarse d	fine to coarse sa ravel Unit cont	and, and ains high		
		-								GC		density of	small root	debris, rotten wo	ood debris,		
	1442.71	-2										and aspha	alt debris w also contain	ith slight smell o s subrounded c	of asphalt		
		-										boulders t	to 38 cm.				
		-									2.59						
			2.74							60		Moist, me	dium dense	e, brown <b>Clayey</b>	Sand		
	1441.71	-3	3.05	10C	GRAB				PI, Sv	30	3.05	fines, 62%	6 fine to co	arse sand, and 2	21% fine to		
		-										coarse su	brounded g	ravel. Unit cont	ains		
		-										Moderate	difficulty ex	cavating due to	several		
		-										large tree	stumps pre	esent, along with	other		
	4 4 4 0 7 4	-										inch diam	eter.	is and large but			
	1440.71	-4															
		_															
		-															
		-															
	1439.71	-5															
		-															
		_															
	1438.71	-6															
		-															
		-															
		-															
	1437 71	Ĺ,															
	1437.71	[															
		_															
-		-															
/11/0		-															
DT 5	1436.71	+8															
JT.GI		Ĺ															
/_DC		Ľ															
ž		-															
O.GP.	1435.71	<u>+9</u>															
3015[		-															
3200		+															
p		F															
N																	

							_ 11	/12/08			EXPLORATION LOG		
					ST		11	/12/08				105	SHEET 1 OF 1
					EN	ND DATE		1-580	Freeway F	vtonsir	n Project	STATION 1354	-94 "P2Am"
					JC	DB DESCRI						OFFSET	
	2m	4			LC	DCATION			Journy, Nev	aua		ENGINEER Acke	۲ ۲
	3 Array	e e	)		BC	DRING			_			Pete	rson
	4		_		E.	A. #		079-01-	, ,		GROUNDWATER LEVEL		
	2				GI	ROUND EL	EV14	37.52 (	m)		11/12/98 NE	METHOD Auge	er
					HA	AMMER DF	ROP SYS	STEMF	Rope - Cathe	ead		BACKFILLED Yes	DATE11/12/1998
	ELEV. (m)	DEP (m)	ТН )	SAN NO.	/IPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DE	SCRIPTION	REMARKS
		_ C _ C	).00 ).46	2A	SPT	3 10 25	35		w, PI, Sv		Moist, dense, brown estimated 25% media to coarse sand. Few	<b>Clayey Sand</b> with um plastic fines, 75% fi cobbles. Surface bould	Bulk sample ne taken from 0 - lers 1.5 meters.
		-								SC	to 1 meter with silty s	and surface veneer.	
	1436 52	1									1 07		
	1100.02	-									Moist, very dense, lig	ht brown Silty Gravelly	/
		- 1	.52								Sand with estimated 80% fine to coarse sa	10% non-plastic fines, and, 10% gravel, Grave	ally
		-		20	ерт	20	40			SM	to cobbley lense at 1	.2 meters.	
	4 405 50	1	.98	28	501	25	48		w, PI, Sv				
	1435.52	_2									2.13	Cilty Crovelly Cond with	<b>b</b>
		_								SM	estimated 20% slight coarse sand, 15% gr	ly plastic fines, 65% fin avel to 2.5 cm.	e to
		-									2.90		
	1434.52	-3 3	3.05			18				_	Moist, dense, brown	Silty Gravelly Sand wit	h %
		-		2C	SPT	15	33		w, PI, Sv	SM	fine to coarse sand, 2	10% gravel.	70
		- 3	3.51			18					3.51		
	1433.52	-4											
		-											
		-											
		Ľ											
	1432.52	-5											
		-											
		-											
		-											
	1 404 50												
	1431.32	_ <b>o</b>											
		_											
		-											
		-											
	1430.52	+7											
_		_											
11/01		-											
T 5/	1429.52	-8											
T.GD		-											
Ő		-											
≥ ∠													
J.GP,	1428.52	<b>-</b> 9											
3015L		-											
\$200		+											
DOT		L											

						۵/	1/00			EXPLO	ORATIO	N LOG			
				S	TART DATE	<u> </u>	1/99								SHEET 1 OF 1
				EI	ND DATE	9/	1/99		vtonoio	n Droioc			STATION	<u>136+50 "P</u>	2Am"
				JC	DB DESCRI	PTION	1-580		xtensic	on Projec	:t		OFFSET	132.73 RT	
	54			LC	OCATION			County, Nev	ada				ENGINEER		
	2Wml	C A		B	ORING		+6+17 (\ 	WQB-8) -					EQUIPMENT	-	
	Z.			E.	A. #	0	079-01-	<b>D</b>		GROU					
	Ľ			G	ROUND EL	EV14	139.02 (	m)		9/1/99	NE	ELEV. M	METHOD	Trackhoe	
				H	AMMER DF	OP SYS	STEM	JA					BACKFILLED	_Yes DA	ATE9/1/1999
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group		MAT	ERIAL DE	SCRIPTION		REMARKS
		0.0	0 11A	GRAE	8				SC SM	0.24	Moist, loc	ose, tan <b>Silty</b>	, Clayey Sand	with	
		-	9 . 11E	GRAE	3				SC	0.55	coarse sa	and, and 10%	6 fine to coarse	gravel.	
		0.6	6							0.00	Moist, de with estin	nse, brown ( nated 35% n	Clayey Sand wi nedium plasticit	th Gravel	
	4 400 00	- 10	, 11C	GRAE	3			PI, Sv			50% fine	to coarse sa	and, and 15% fi	ne to	
	1438.02 -	1 1.0	/					,	-		coarse su scattered	brounded to	o subangular gra 15 cm.	avel. Few	
									SP		Moist, de	nse, orange	brown to brown	Poorly	
		-							SC		medium t	o low plastic	ay and Gravel V city fines, 49% f	ine to	
		-									coarse sa	and, and 42%	6 fine to coarse	hundont	
	1437.02 ·	-2									subround	led to suban	gular cobbles.	bundani	
		-								2 44			-		
										2.77	Moist, me	edium dense	, brown <b>Poorly</b>	Graded	
		2.74	4						SP		Sand with	h Silt and G	ravel with 11%	sand and	
	1436.02 ·	<b>3</b> 3.0	5 11C	GRAE	8			PI, Sv		3.05	15% fine	to coarse su	brounded grave	el. Unit	
		-								\	contains : 45cm	subrounded	cobbles and bo	oulders to	
		-									Difficult e	xcavation be	etween 2.4m an	id 3.0m,	
		-									due to ha	ird soils.			
	1435.02	<b>_</b> 4													
	1100.02	- ·													
		-													
		-													
		- _													
	1434.02	_5													
		_													
		_													
		-													
	1433.02 ·	-6													
		-													
		_													
	1432.02 ·	-7													
		-													
		-													
/01		-													
5/11	1431.02 ·	<b>–</b> 8													
GDT	1101.02	-													
DOT.		F													
NV_L		-													
ΓďΞ		-													
15D.(	1430.02 ·	T_8													
.06 <i>L</i> C		Ĺ													
DT 0(		-													
V_D(		F													
z		1		1	1				1	1					

						۵/	1/00			EXPL	ORATIO	N LOG			
				ST	FART DATE	<u> </u>	1/99								SHEET 1 OF
				E١	ND DATE	9/	1/99			- Desis			STATION	137+25 "	P2Am"
				JC	DB DESCR	PTION	1-580	Freeway E	xtensic	on Projec	7		OFFSET	<u>118.31 R</u>	
Jr.				LC	OCATION		ashoe (	County, Nev	ada				ENGINEER		<b>`</b>
2Mm	6	•		BC	DRING	14	6+92 (\	/VQB-10)					EQUIPMENT		,
		1		Ε.	A. #	00	)79-01-{	5		GROU	NDWATER		OPERATOR		
	the second second			GI	ROUND EL	EV14	32.46 (	m)		0/1/99	DEPTH m	ELEV. m	METHOD	Trackhoe	
				HA	AMMER DF	OP SYS	STEM	IA		0/1/00			BACKFILLED	_Yes	DATE9/1/1999
ELEV.	DEF	PTH	SAN NO.	MPLE TYPE	BLOW C 150 mm	OUNT Last	Percent	LAB TESTS	USCS Group		MAT	ERIAL DI	ESCRIPTION		REMARKS
(11)		" 0.00 0.30	13A	GRAB		<u>300 mm</u>	Recova		SP	0.04	Moist, me	dium dense	e, brown <b>Poorly</b>	Graded	
	-	0.50							SIVI	0.34	non-plasti	ic fines, 70	% fine to coarse	sand, and	-
	-	0 76									20% fine	to coarse s	ubrounded to su	bangular	
	-	0.70	13B	GRAB				PL Sv	SC		Moist, me	dium dense	e, dark brown <b>C</b>	ayey	
1431.46	-1	1.07	100						-	1.22	Sand with 55% fine t	1 44% medi to coarse s	um plasticity fine	es and	
										1.22	Moist, me	dium dense	e to dense, brow	n Clayey	-
	_	1.52							-		Sand with	n Gravel wit	th 14% medium	to low and and	
		1.83	13C	GRAB				PI, Sv			42% fine	to coarse s	ubangular to sul	prounded	
1430.46	-2								sc		gravel. U to subrou	nit also cor nded cobbl	itains abundant es and boulders	subangular to 20cm.	
	-														
	-	2.59													
	_	2 00	13D	GRAB				PI, Sv		2.00					
1429.46	-3	2.90								2.90	Easily exc	cavated from	n 0.0m to 1.2m.	Moderate	-
	-										difficulty e	excavating I	pelow 1.2m due	to	
	-										presence		and cooples.		
	-														
1 400 40															
1428.46	4														
	_														
	-														
	-														
1427.46	-5														
	F														
	_														
1426.46	-6														
	-														
	-														
1425.46	-7														
	-														
	-														
5	-														
6/11/	-														
1424.46	-8														
0.TO	_														
	F														
	F														
0. 1423.46	-9														
7901	-														
1 00	Ľ														
G	F														
Ž															

							_ 11	/12/98			EXPLORATION	LOG			
					S	TART DATI	11	/12/00							SHEET 1 OF 1
					El	ND DATE		12/90	 Eroowov E	vtonoir	n Broiget		STATION	137+22	"P2Am"
					JC	DB DESCR		<u>1-500</u>		xtensit			OFFSET	<u>140.39 F</u>	
	100				LC	OCATION			Jounty, Nev	/ada			ENGINEER	Acker	
	1 Mart	C	9		BO	ORING	14	7+00	_				EQUIPMENT	Petersor	
	T.				E.	A. #		079-01-	<b>D</b>			EVEL			·
	le				G	ROUND EL	.EV14	34.47 (	m)	<u> </u>	11/12/98 NE		METHOD	Auger	
					H	AMMER DF	ROP SYS		Rope - Cath	ead			BACKFILLED	Yes	DATE
	ELEV.	DE	PTH	SAI	MPLE	BLOW C	OUNT Last	Percent	LAB TESTS	USCS	MATE		SCRIPTION		REMARKS
	(m)	1)	n)	NO.	TYPE	Increments	300 mm	Recov'd		Group	Moist medi			ltv	Bulk sample
		-	0.00	1A	SPT	8	21		w, PI, Sv		Gravelly Sa	and Fill wit	h estimated 20	% slightly	taken from 0 -
		-	0.46			13				-	plastic fines	s, 65% fine cm. Cobbl	e to coarse sand ev at 0.75 - 1.2	d, 15% meters.	1.5 meters.
											Slightly moi	ist, dense,	light brown Cla	yey Sand	
	1433.47	-1									fine to coars	se sand, 20	% low plastic fil	lium gravel.	
		-												U U	
		-	1.52												
		-		1B	SPT	6 21	48		w. PL Sv						
	1432 47		1.98			27			,,.	_					
	1102.11	-									2.13 Slightly moi	ist. dense.	light brown Silt	v Sand	_
		-									with estimat	ted 25% n	on-plastic fines	, 75% fine	
		-								CM	sand. Slight	tiy cement	ed at 3 meters.		
	4 404 47	-	3.05							SIVI					
	1431.47	-3	5.05	1C	SPT	7	50/0		w PL Sv	-					
		_	3.35	10		50/0	00/0		w, r i, ov		3.35				_
		-													
		-													
	1430.47	-4													
		_													
		-													
	1429.47	-5													
		-													
		_													
	1428.47	-6													
		-													
		-													
	1427.47	<b>-</b> 7													
		_													
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	JOB DESCRIPTION 1-580 Freeway Extensi								xtensic	OFFSET 1/4.64 LI				
	LOCATION VVasnoe County, Nevada							County, Nev	ada					
	2Mm			BORING <u>147+27 (VVQD-9)</u>					[		_			
					E.A. #									
					GROUND ELEV. 1900.99 (III)					9/1/99 NE METHOD Iracknoe				
				HA	AMMER DR	OP SYS		NA		BACKFILLED Yes DATE 9/1/1999				
	ELEV. (m)	DEPTH (m)	SA NO.	MPLE TYPE	BLOW C 150 mm Increments	OUNT Last 300 mm	Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION REMARKS				
		- 0.00 - 0.30	12A	GRAB					SC SM	Moist, medium dense, light brown <b>Silty,</b> 0.30 <b>Clavey Sand</b> with estimated 20% low plasticity				
		-								fines, 65% fine to coarse sand, and 15% fine to				
		-								Moist, medium dense, brown <b>Poorly Graded</b>				
	1505 59 -	- 0.91 - 1							-	Sand with Clay and Gravel with 10% medium				
		1.22	12B	GRAB				PI, Sv	SP SC	and 24% fine to coarse subrounded gravel.				
		_								Abundant subrounded cobbles and boulders to 60cm.				
		-												
	1504 50	-								1.98				
	1304.39									Moist, medium dense, brown <b>Poorly Graded</b>				
		_ 2.44							SP SM	fines, 76% fine to coarse sand, and 16% fine to				
		2.74	12C	GRAB				PI, Sv		2.74 contains scattered subrounded cobbles and				
	1502 50 -									boulders to 20cm. Unit derived from				
	1505.59	- 3								Moderate difficulty excavating due to large				
		-								boulders present to 24 inch diameter.				
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MONITOR_METRIC 0079015M.GPJ LAGWNL01.GDT 5/11/01

Black Eagle Consulting, Inc. Page 1 of 1 1345 Capital Blvd., Suite A **MW-2** Reno, Nevada 89502-7140 Telephone: (775) 359-6600 Fax: (775) 359-7766 Monitoring Well Log Client: CH2M Hill Project: I-580 Freeway Extension Monitoring Wells Project No.: 0079-01-5 Location: Washoe County, Nevada Supervised by: MG Drilling Co.: Haztech Drilling Method: 152 mm HS Auger Sta. 34+25 Date Started: Borehole Location: 12/18/98 Date Completed: 12/18/98 Sample Graphic Well Depth Elev. Log Number Interval Type Description Scale Depth N Valı Construction (m) (m) Surface Elevation (m): 5141.34 Moist to wet, loose to medium dense, dark grey Silty Sand with estimated 25% slight to low plastic fines, Cement Plug Solid 2" PVC 75% fine to coarse sand. Bentonite Seal 2 Colorado 8x12 SM Silica Sand Slotted 2" PVC 4  $\nabla$ SS 12 А 5135.3 6 Wet, dense, grey Silty Sandy Gravel. ÷J 6.0 GM 0 5133.8 Wet, medium dense, grey **Silty Sand** with estimated 15% non--plastic fines, 85% fine to coarse sand. 7.5 8 SM 10 В SS 11 5129.3 12 12.0 Wet, dense, grey Silty Sandy Gravel. GM 5127.8 0 Wet, dense, grey **Silty Gravelly Sand** with estimated 10% non-plastic fines, 80% fine to coarse sand, 10% 13 5 14 Ð gravel. t С SS 32 16 SM D (th 18 End Cap 1 5122.8 D SS 16 Wet, medium dense, green to rust orange **Clayey** Sand with estimated 35-45% medium plastic fines, 18.5 **SC** 5121.8 19.5 55-65% fine to medium sand.  $\overline{\Delta}$ AC Auger Cutting SAMPLE TYPE  $ss \ge$ LEGEND Water found Split Spoon ▼ cs Continuous Static Water Level ST Shelby Tube

RC

Rock Core

WC Wash Cuttings

WONITOR_METRIC 0079015M.GPJ LAGWNL01.GDT 5/11/01



MONITOR_METRIC 0079015M.GPJ LAGWNL01.GDT 5/11/01

Rock Core





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