PROJEC	T	McCoy			HOLE NO. 66-	8
LOCATIO	ON	Churchi	ill County, Nevada	COLLAR EL.	5795 feet	
COMPAN	Υ	AMAX -	O'Brien Resources	TOTAL DEPTH		
CONTRAC	CTOR_	America	an Geothermal Drilling	SPUDDED 10/30,		6/80
LOGGED BY Jim Gros			PSS		THI SHED ST I	-
DEPTH LITHOLOGY				DESCRIPTION		CASING
0		.	0-90' No samples - sam	m.		
10 -			During the drilling op thermal Drilling (0-80 as accurately as they	O feet) the samples were by Anderson Dr	were not collected	-
20 _			in the interval 0-800 0-90' Some samples of	question regarding feet were labeled p	whether all samples	
30			interval were Tuff.			
40 -		LE				
50		SAMPLE				-
60		S NO				
70 -		TUFF	•			-
80		T				
90 -	100	10	90' to approximately 66 euhedral sanidine, euhe	dral magnetite, euh	edral phlogopite	
100	0,100	1336	and biotite, aphanitic white. Probably latiti aphanitic to pumiceous	c composition. 90%	sh orange pink to of material	
110	(1,10)	9(1)/((
120	110	0((0)(@ 120' euhedral biotite	inside clear sanid	ine.	
130	11/16	12.00	@ 130' oxidized magnetit	te, first indication	n of green alter-	
140-		6				·
***************************************		1/1/1/				·

PROJECT	McCoy	HOLE NO. 66 9
LOCATION	Churchill County, Nevada	HOLE NO. 66-8 COLLAR EL. 5795 feet
COMPANY	AMAX - O'Brien Resources	TOTAL DEPTH 2510 feet
CONTRACTOR_	American Geothermal Drilling	SPUDDED 10/30/79 FINISHED 3/16/80
Incom av	lim Gross	

LOGGED		ss SPUDDED 10/30/79 FINISHED 3/16	5/80
DEPTH	LITHOLOGY	DESCRIPTION	CASING
150_ 160_	101 01 101	@ 150'anhedral white sodic (albite) feldspar intergrown with groundmass.	
170-	19,000		
180_	ולוונס(י) (
190 – 200–			
210			
220			
240_			
250-		@ 250' no sanidine, 100% orange pink aphanitic, some biotite.	
260 270	1.01	@ 260' minor sanidine & biotite. @ 270-280' no sample.	
280_	SAMP.		
290	((()))		

PROJECT	McCoy			
LOCATION	Churchill County, Nevada		HOLE NO	66-8
COMPANY	AMAX - O'Brien Resources	COLLAR EL. 5795 f		
CONTRACTOR	American Geothermal Drilling	TOTAL DEPTH 2510 fo	eet	
LOGGED BY	Jim Gross	SPUDDED 10/30/79	FINISHED_3	3/16/80

CONTRAI LOGGED		n Geothermal Drilling SPUDDED 10/30/79 FINISHED 3/1	6/80
1	BY Jim Gros	55	
 DEPTH	LITHOLOGY	DESCRIPTION	CASING
300_	-		-
310_3	1011,011		
320	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
330	0-0-		
340_	1 () () () () () () () () () (@ 340' 90% of material is now white and aphanitic.	
350	1000	@ 350' same as 340' with orange yellow stain.	
360_	2/1/0	@ 360' same as 350' mostly white, very few sanidine xls, yellow stain.	·
370	10,000		: .
380			
390	0 (1 d)	@ 390' same as 360', trace sphalerite.	
400	055	@ 400' note: coatings seen on and through aphanitic cuttings.	
410-	A	@ 410' same, less orange & yellow, faint purple color to some fragments and HgS(?).	
420- 430-	100 CH	@ 420' purple color zone – orange & yellow color back.	
440	11/10/10		
450	75/10/1	@ 440' concentrations of yellow mineral on rotted, altered feldspar (sanidine).	

SUGGESTA ENGLOWELLOW COMPONALION

SHEET 4 OF 17

LITHOLOGIC LOG

PROJECT McCoy

LOCATION Churchill County, Nevada COLLAR EL. 5795 feet

COMPANY AMAX - O'Brien Resources TOTAL DEPTH 2510 feet

CONTRACTOR American Geothermal Drilling SPUDDED 10/30/79 FINISHED 3/16/80

LOGGED BY Lim Gross

CONTRA		0 44 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PTH 2510 fe		
LOGGED	BY Jim Gross		0/30/79	FINISHED 3/	16/80
DEPTH	LITHOLOGY	DESCRIPTION			CASING
450 _					
460	1,18,19,19				
470	0 1/1/8/				
480	16/18/18/18/18/18/18/18/18/18/18/18/18/18/				8 5/8 @ 488
490	191191				4881
500	01416				
510	1,0,1,				
520	NO	520'-530' No sample			
530	SAMP.	530'-540' same as @ 510-520'			
540	LE Q	540'-560' No sample			
550	NO SAMPLE				
560	2				
570 .	101,161	@ 570' reappearance of green celadonite biotite to 1 mm.	& prominent	black	
580	19:18:	@ 580' same as 570'			
590	10101	9 590' significant steel chips			
600		600' same as above, noticeable amounts material (not all submitte now).		grained	

•			LITHOLO	GIC LOG	SHEET 5	OF
	PROJE	CT McCoy			HOLE NO6	6-8
	LOCAT	ION Churchill	County, Nevada	COLLAR EL.	5795 feet	
	COMPAN	Y AMAX - 0	Brien		2510 feet	-
			Geothermal Drilling	SPUDDED 10/30	/79 FINISHED	3/16/80
7	LOGGED	BY Jim Gross	to 700' - Eugene V. C	iancanelli below 700'		
	DEPTH	LITHOLOGY		DESCRIPTION -		CASING
-	600 _	1	600'-650' No sample			
	610					
	620					
	630 1 640 640	NO SAMPLE	•			
2 3 2 2	650	(a)	650'-660' first appe zite material, light in tuff. 660'-680' No sample	earance of cherty or find brown color. This cou	ne grained quart- uld be xenoliths	
A THIS INTERVAL	· °/°¬	NO SAMPLE	Also sample collecti Drilling was not pro labeled. The actual contact b	ry in this portion of hon and labeling by Amer perly performed and some etween tuff and limesto Check gamma log as tuff	rican Geothermal me samples mis-	-
SAMPLES IN	690	10110	dioactive than limes in this interval also	tone. Check temperatur	e and S.P. logs	
ALL SA	700	11.01.19	with dark and light of	e powdery cuttings, lig colored fragments inclu	ding shades of	6 5/8 @ 704'
	710-	(10,0)	red, brown, black, whe section is probably is zones. Sulfides pres	nite & gray rock and xinterbedded tuffs with sent as pyrite.	fragments. The some welded	
•	720-		positive identificati stone, partially effe	MESTONE? Check this roon. Unknown black rockervesces in HCl acid, so	k possibly lime- ome shiny black	
	740		xi faces seen. Shoul present, possibly car	d check in case economic bon or manganese. Form urface when samples was	ic minerals mation of shiny	

SHEET 6 OF 17

	r NOJEC				HOLE NO.	66-8	
	LOCATIO		County, Nevada C	COLLAR EL	5795 feet		
	COMPANY		Brien Resources T	OTAL DEPTH_			
	CONTRAC	TOR American	C	PUDDED 10/30		3/16	6/80
	LOGGED	BY Eugene V.	Ciancanelli Drilling (b		_		
	DEPTH	LITHOLOGY	DESCRIPT	TION		-	CASING
	750_					\dashv	
	760 <u>-</u>						
	770	芦 草					
·	780		775'-790' SANDSTONE - CALCAREO Sandstone, medium dark gray, ficalcareous SS.	OUS ne grained,	sulfides present	,	
	790		@ 790' becomes darker in color in 730-775 interval. It is posa limestone.	and more li ssible that	ke the unknown rethe black rock is	ock s	
	800		790'-1020' LIMESTONE				
	810		Limestone - dark gray N3, sulfi ent, but sulfides less common i higher in hole.	ides & calci in limestone	te veins both pre below 790' than	: S -	
	820		@ 800' Anderson Drilling Co. be correct below 800 feet.	egan samplin	g and samples are		
	830						
-	4		•				ı
	840		@ 840' becomes like interval 730 ward changes to interval 790' to	0'-775' then ype limeston	n gradually down-		
	850		¥				
	860						
	870			•			
	880				•		
	890						
	900			agamatan Panghadiga T			4.2 ⁴)

	LOCATIO	N_ Churchill	County, Nevada	COLLAR EL.	HOLE NO	
	COMPANY	AMAX - 0	'Brien Resources		2510 feet	
	CONTRAC	TOR Anderson	Drilling	SPUDDED 10/3	30/79 FINISHED	3/16/8
	LOGGED	BY Eugene V	. Ciancanelli			
	DEPTH	LITHOLOGY		DESCRIPTION		
	900	14-4				
	910					
	920	屈				
	930			,		
	940					
- '	950		·			
	960					
	970 -		•			
	980		@ about 980' limeston	e becoming sandy towa	rd bottom of	
	990			··		
1	1000	岸山				
1	010	聞				
1	020		1020'-1040' SANDSTONE Sandstone, medium dark	gray, medium to fine	grained poorly	
1	030		sorted, sulfides again in the interval 790'-1 coarsens downward unti	020'. The grain size	radually	
11	040	*****	1040'-1060' CONGLOMERA except for coarser gra	TE OR COARSE SANDSTON in size same as 1020-	E 1040'.	
10	050		· ·			o l

LITHOLOGIC LOG

SHEET 8 OF17

PROJECT McCc	ру	HOLE NO. 66-	-8
LOCATION Chur	chill County, Nevada	COLLAR EL. 5795 feet	
COMPANY AMAX	C - O'Brien Resources	TOTAL DEPTH 2510 feet	
CONTRACTOR Ande	rson Drilling	SPUDDED 10/30/79 FINISHED 3/1	16/80
LOGGED BY Euge	ne V. Ciancanelli		
DEPTH LITHOLO	DI DI	ESCRIPTION	CASING
1050	Veinlets of sulfide prob	ably mostly pyrite.	
1060	1060'-1080' SANDSTONE Sandstone same as interv	al 1020'-1040'	
1070			
1080	1080'-1240' CONGLOMERATE Probably coarse sandston	OR COARSE SANDSTONE e, veins of sulfides as pyrite.	
1090			
1100	@ 1100' becomes lighter	colored to medium gray N5.	
1110			
1120			-
1130			
1140		·	
1150		1700 22.67	
1160		1700 32.67	
1170			
1180		· .	
1190			
1200		e de la companya de l La companya de la companya de	

	LITHOLOGIC LOG			SUEE! >	_ 01
PROJECT	McCoy .		•	HOLE NO.	66-8
LOCATION	Churchill County, Nevada	COLLAR EL.	5795	 feet	
COMPANY	AMAX - O'Brien Resources	- TOTAL DEPT	H 2510	feet	
CONTRACTOR	Anderson Drilling	-	0/30/79	FINISHED	3/16/80
LOGGED BY	Eugene V. Ciancanelli				
ž.					

	LUCATIO	ondi citi i i	oddirey, nevada	COLLAR EL. 5795 f	eet	
	COMPANY	AMAX - 0'	Brien Resources	TOTAL DEPTH 2510 f	eet	
	CONTRAC	TOR Anderson	Drilling	SPUDDED 10/30/79	FINISHED 3/	16/80
	LOGGED	BY Eugene V.	Ciancanelli			
	DEPTH	LITHOLOGY	C	ESCRIPTION		CASING
	1200 _	[47,7]				
	1210		The grain size has been there is more of medium	becoming less coarse so to fine grained sandstor	that by 1220' ie.	
	1220		0.12201			·
	1240		•	ne light gray N7 quartzit	e fragments.	
			No matrix sulfides prese	oles & cobbles in a Mediu ent as pyrite.	1	
	1250		quartzite with the matri pebbles are rounded.	same light gray to mediu x being the light gray c	m dark gray olor. The	
	1260	• • • • • •	•			
	1270 -			•		
	1280					
.	1290	• • • • • • • • • • • • • • • • • • • •				
	1300					
	1310					
	1320	* * * * * * * * * * * * * * * * * * *				
	1330		· ·			
	1340 _					1534.N
	1350	::::				

SHEET 10 OF 17

PROJEC.	T McCOY			•	HOLE NO	66-8	}
LOCATIO	ONChurchill	County, Nevada	COLLAR EL.	5795 f			
COMPANY	rAMAX - 0'	Brien Resources	TOTAL DEPTH				-
CONTRAC	CTOR Anderson	Drilling	SPUDDED 10/		FINISHED	3/16	/8n
LOGGED	BY Eugene V.	Ciancanelli					
DEPTH	LITHOLOGY	DE	SCRIPTION				CASING
1350 _	-					1	
1360							
1370		@ 1370' increase in pyrit	e.				
1380			*				
1390							
1400		•					
1410							
1420		•					
1430							
1440		@ about 1440' unit becomes	somewhat more s	andy.			
1450		.*					
1460							
1470							
1480			·				
1490			As Aleikai	internation			
1500					a _{ji} sangsegara pelak ili dalah	A.	AN S

SHEET 11 OF 17

		T_McCoy		HOLE NO. 66-	-8
	LOCATIO		County, Nevada	COLLAR EL. 5795 feet	
	COMPANY		Brien Resources	TOTAL DEPTH 2510 feet	
	CONTRAC		Drilling	SPUDDED 10/30/79 FINISHED 3/1	6/80
******	LOGGED	BY Eugene V.	Ciancanelli		
	DEPTH	LITHOLOGY	DESCR	IPTION	CASING
	1500				
	1510				
	1520 <u> </u>		Table 1 differ to medium drav	ened down to 1620' and then be- to medium light gray. At this conglomerate and less sandy.	
	1540		. • • • • • • • • • • • • • • • • • • •		
	1550		Polition of the Sample. Uccas	fine and brown mud was a large	
	1560		This continues to about 1620'	•	
	1570		•		·
	1580				
	1590				
	1600				
	1610				
	1620		@ 1620' QUARTZITE CONGLOMERATE		
	1630		Quartzite, relict pebble outl	ines, light gray N7.	
,	1640		*		
	1650				
į	l				ļ

LITHOLOGIC LOG

SHEET 12 OF 17

	PROJECT	ГМсСоу			HOLE NO. 66-8	
	LOCATIO	N Churchill	County, Nevada	COLLAR EL. 5795 fe	et	
	COMPANY	AMAX - O'B	rien Resources	TOTAL DEPTH 2510 fe		
	CONTRAC	TOR Anderson	Drilling	SPUDDED 10/30/79		16/80
	LOGGED	BY Eugene V	. Ciancanelli			
DI	ЕРТН	LITHOLOGY		DESCRIPTION		CASING
	1650		@ 1650' began to get Sulfides fairly abund	light brownish gray colore ant.	ed quartzite.	
	1670_ 1680_ 1690_		zite. These cuttings @ 1680' same as above	1670' - sulfides other the	tic quart-	
	1700					
	1720_		•			
	1730_		@ 1730' same as at 1650	0'		
	1740		@ 1740' same as at 1680)'		
	1750		•			
1	760					
1	770					
1	780					
1	790		· · · · · · · · · · · · · · · · · · ·			٠.
1	800				Palas da Labida (n. 1919). Santa da Labida (n. 1919).	1 m

SHEET	13	0F	17	
_				

	PROJECT	McLoy			HOLE NO. 66	6-8
	LOCATIO	ON Churchil	l County, Nevada	COLLAR EL.	5795 feet	· · · · · · · · · · · · · · · · · · ·
	COMPANY	MAX - 0	'Brien Resources	TOTAL DEPTH	2510 feet	
	CONTRAC	TOR Anderson	Drilling	SPUDDED 10/3	30/79 FINISHED 3/	16/80
<u> </u>	LOGGED	BY Chris Tower	(1800' to 1880') - Eugene V.	Ciancanelli	(below 1880')	
	DEPTH	LITHOLOGY		RIPTION		CASING
	1800_			A-1		
	1810		@ 1800' white quartzite w/ sulfides minor about 5% re hematized.	'abundant pyri :ddish quartzit	ite and other te probably	
	1820_ 1830_		@ 1830' white quartzite no is red stained probably alo	hematized chi	ps, some quartzite	
	1840-		sulfides.	my viactares,	decrease in	
	1850					
	1860					
	1870-		· •			
	1880		@ 1880' quartz pebble fragme fine grained, medium light of gray framents, abundant sul	grav N6. minor	light brownich	
	1890-		yellowish brown.	tings. Some py	yrite oxidized to	
	1900-		@ 1890'slightly less sulfide N6 color.	s; light N7 to	medium light gray	
	1910-					
	1920-					
	1930		@ 1930' to 1980' some white sides.	crushed fault	gouge with slicken	
	1940-				· · · · · · · · · · · · · · · · · · ·	
	1950	1::				

SHEET 14 OF 17

LITHOLOGIC L	0	6
--------------	---	---

PROJEC	TMcCoy				_ HOLE NO	66-8	3	
LOCATIO	ON Churchill C	ounty, Nevada	COLLAR EL.	5795	_ HULE NO feet			
COMPAN	Y AMAX - O'Br	ien Resources	TOTAL DEPTH		feet			
CONTRAC	CTOR <u>Anderson</u>	Drilling	SPUDDED 10,		FINISHED	3/1	6/80	
 LOGGED	BY Eugene V	. Ciancanelli			FINISHED			
DEPTH	LITHOLOGY		DESCRIPTION				CASING	-
1950_							O I	_
1960_		@ 1960' sulfide	s decreasing.		·			
1980_		@ 1980' gouge m	aterial reappears.					
1990-		@ 1990' darkeningray.	ng in color to medium gra	ay and m	nedium dark			
2000		@ 2000' sulfides	rare.					
2010		@ 2010' color li	ght gray to medium light	gray.				
2020		@ 2020' some chi	ps big enough to see peb	ble out	lines.			
2030		@ 2030' sulfides	increasing.					
2040		@ 2040' minor lig	ght brownish gray colored	d fragme	ents.			
2050_								
2060		@ 2060' - 2080' s	ulfides rare.					
2070_								
2080_								
2090		@ 2090'-2100' mind gray fragments.	or sulfides, plus minor l	light bi	rownish			
2100	::::				•			

LITHOLOGIC LOG

SHEET 15 OF 17

	PROJEC	т МсСоу		HOLE NO. 66-8	
	LOCATIO	ONChurchil	l County, Nevada	COLLAR EL. 5795 feet	
	COMPAN	YAMAX - 0	'Brien Resources	TOTAL DEPTH 2510 feet	
	CONTRA	CTOR <u>Anderson</u>	Drilling	SPUDDED 10/30/79 FINISHED 3/16	5/80
-	LOGGED	BY Eugene V	. Ciancanelli	, 111 311 25	
	DEPTH	LITHOLOGY		DESCRIPTION	CASING
					CAS
	2100_				
	2110_		@ 2110' color mediu	m gray - some minor gouge material.	
	2120_		silicification follo	common, one fragment showed secondary owing brecciation. Color is medium light light brownish gray fragments.	
	2130 <u> </u>		@ 2140' minor green	chlorite.	
	2150-				
	2160-		fragments - other fr	rease in percent of light brownish gray ragments medium light gray to medium gray. Ore evidence of crushing of the quartzite	
	2180		@ 2180'-2370' HEMATI Approximate top of h	TIC (?) QUARTZITE CONGLOMERATE ematitic (?) zone in the quartzite con-	
	2190		glomerate. About 10 material present as material which is fr	to 20% of fragments are hematite (?) grayish red finely laminated micaceous iable. The remaining 80-90% of frag-	
	2200-		gouge material to be	conglomerate. Acid showed some minor carbonate. No evidence of sulfides.	
	2210-			terial grayish red to dark reddish brown	
	2210		@ 2200' same as 2180	' except 30-40% hematitic material.	
	2220		@ 2210' about 10% her	matitic material.	
	2220-		@ 2220' same as 21 90	'.	
	2230-		@ 2230'-2240' about {	80% hermatitic material.	
	2240-				
	2250				

LITHOLOGIC LOG

SHEET 16 OF 17

	PROJECT	TMcCoy		HOLE NO	66-8
	LOCATIO	ONChurchil	l County, Nevada	COLLAR EL. 5795 feet	
	COMPANY	AMAX - 0	'Brien Resources	TOTAL DEPTH 2510 feet	
	CONTRAC	TOR Anderson	Drilling	SPUDDED 10/30/79 FINISHED	3/16/80
	LOGGED	BY Eugene V	. Ciancanelli		
x-	DEPTH	LITHOLOGY		DESCRIPTION	CASING
	2250_	8.5.5	@ 2250' about 50% hem	atitic material.	
	2260_		@ 2260' about 20-30% abundant pale red fra	hematitic material grayish red - also gments.	
	2270_		@ 2270' same as 2250'	• •	
	2280_		@ 2280' about 50% gray	vish red hematitic material.	
	2290-		@ 2290' about 10-20% h	nematitic material.	
	2300		pale red sugary textur	sh red hematitic material - the rest ed quartzite fragments with minor sul	is
	2310		fides.		
	2320-		@ 2320' more white qua	rtzite fragments now present.	
	2330		@ 2330'-2360' 5% grayi red quartzite, 75% pin sulfides.	sh red hematitic quartzite, 20% pale kish gray to white quartzite, minor	
	2340		surriues.		
	2350	=- - =	·		
	2360				
	2370-		@ 2370' - QUARTZITE CON Sample is white quartzi	GLOMERATE te with some fault gouge fragments.	
	2380			,·	
	2390		× .		·
	2400				

SHEET 17 OF 17

3"	PROJECT			HOLE	NO. 66-8	
	LOCATIO		1 County, Nevada	COLLAR EL. 5795 feet		_
	COMPANY CONTRAC			TOTAL DEPTH 2510 feet		
	LOGGED		Drilling	SPUDDED 10/30/79 FIN	11SHED 3/16/80	0
*****	LOGGED	Eugene V	. Ciancanelli to 2410' -	Chris Tower below 2410' to T.D		
-	DEPTH	LITHOLOGY	DESCF	RIPTION	CASING	
	2400_	177571				\dagger
	2410_ 2420_		2410' to 2420' white minor sulfides, slig	quartzite w/ occasional hemati htly calcareous.	te,	
	2430_		2420' to 2510' 50% whematized quartzite w	white quartzite, 50% hematite ar	nd grains.	
	2440_		2440' slightly calcar	eous.	±	
	2450_					
	2470-		2470' decrease in hema	atite, white quartzite 65%, hema	atite	
	2480-		Tomatized quartz	ite 20%, cuttings are large.		
	2500-		• •			
	2510_					
	Justin					
	an Trans		*			
	1			t trages in the area (AA) in the second of the	Military Comments	