

CONTACT INFORMATION Mining Records Curator Arizona Geological Survey 3550 N. Central Ave, 2nd floor Phoenix, AZ, 85012 602-771-1601 http://www.azgs.az.gov inquiries@azgs.az.gov

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• EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates: 50,266 E 50,706 N
Type of Drill: WD DD RD CD	Inclination;
Hole No.: 1 (Sheet 1 of 2)	Collar Elev: 189.0
Date Drilled: 3/1/66 started 8:00 a.m.	Logged By: HWH

3/2/66 completed 2:00 pm

		FT.		ASSAY		
ROM	TO	TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		Cu	١.	
0	7	7	Loose fill and aluvium (brown)			
			Set casing to 13'			
0	63	63	Loose aluvium and overburden - Sand & Gravel			
63	68		Loose aluvium and overburden - Sand & Gravel - No sample			
68	73		Same - Sampled	. 32		
73	78		Same - Sampled	.41		
78	84		Same	. 37		
84	89		Same - Sampled. Hole caved at top. Has to water top to	• 57		
•	ĺ		keep from salting samples. Sample salted.			
89	94		Contact 92' - Hard, consolidated aluvium. Fair of copper	0.81		
94	99		Consolidated hard aluvium. Fair Cu. Gila Cg.	1.31		
99	104		Same as above. Cu in samples	1.10		
104	109		Cons. hard aluvium - fair Cu in sample	0.89		
109	114		Hard cons. aluvium - Good cu in sample. Soft streak 112'-113'	1.57		
114	119		Hard Gila Cg Good Cu	1.65		
119	124'6'		Hard Gila Cg Cu Fair	1.58		
	126'6'		Down the hole tool attached. G. Cu sh. Hard Gila Cong.	1.62		
126'6"	131'5"		Hard Gila Cong. Gd. Cu show	1.40		
	136.5		Hard Gila Cong. Cu show fair	0.94		
	141.5		Same. Water injection at 141.5' Water injection stopped	0.79		
141.5	147.0	5.5	Hard Gila cong. Cu show fair	1.10		
	152.0		Hard Gila cong. Cu show fair	0.95		
152.0	157.0		Gila Cong. Fair Cu	0.73		
	162.0		Gila Cong. Fair Cu	0.93		
	167.5		Gila Cong. Fair Cu	0.68		
167.5	172.5		Gila Cong. Cu show	0.66		
172.5	177.5		Gila Cong. Cu show Tr - Stopped 3/1/66. Water in hole at			
	8		176.0 - Very hard drilling	0.65		
177.5	182.5		Sm. amt. water. Gila Cong. started 3/1/66			
			Sm. sample - Poor Tr. Cu	0.84		
182.5	188.0	5.5	Poor sample. Gila Cong. much softer. Cu show fair	1.06		
188.0	193.0		190' - Clay Sm. 3' - Wet sample. Possible fault gouge or			
			clay on granite bedrock	~		
	1					

 EL PASO NATURAL GAS COMPANY MINING DIVISION
 P. O. Box 1492
 El Paso, Texas

Property:	Emerald Isle	Coordinates:
Type of Drill;	: WD DD RD CD	Inclination:
Hole No.: 1(S	Sheet 2 of 2)	Collar Elev:
Date Drilled:		Logged By;

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	
	203.0 208.5 213.5 218.5 223.5 229.0 231.5	5.5 5.5 2.5	Water flowing at 193' - Wet clay sample material-Poor Sample Water flowing. Wet sample. Cu sh. Poor sample & circulation Water flowing. Wet sample. Cu sh. Poor circulation Wet sample. Good Cu show. Gila Cg (?) Good penetration Wet sample. Trace Cu shown. Gila Cg (?) " " Wet sample. Fair Cu Lg. pieces Gila Cg (?) " " Wet sample. Fair Cu Lg. Pieces Gila Cg (?) " " Hole water clear immediately after drilling stopped. No overburdance of material when water flowed Core Barrel put on. When hole washed, brown, altered material washed from hole Bedrock. Banded texture gray gnessic appear. Galena noticed. Exercise Possibly from tarp. Fresh appearance last 1 ft. of core. Hole bottomed 2:00 p.m. 3/2/66	1.83 1.19 .90 1.70 0.37 0.61 0.34 0.11 0.09	

• EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,867 N 50,365 E
Type of Drill: WD DD RD x CD	Inclination:	
Hole No.: DH #2	Collar Elev:	200
Date Drilled: 3/2/66 Started 3:15 p.m.	Logged By:	HWH

3/3/66 Completed 12:00 p.m.

ROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
-				
0	75	75	Set casing to 13'. Boulder at 18'. Hole caving at 60'. Recent aluvium. Good penetration.	
75	80		Sampled. Recent aluvium	. 85
80	85.5	5.5	Slow penetration to 82'. Softened up. Tan recent aluvium sampled.	. 47
85.5	90.5	5.0	Boulder at 86. Fair penetration. Tan recent aluvium sampled	.46
90 . 5	95.5	5.0	Tan recent aluvium. Fair penetration. Boulders. Sampled	.44
95.5	100.5	5.0		.44
100.5	106.0	5.5		.38
°06 .0	111.0	5.0		
			Slow penetration. Cu show fair	1.35
	116.0	5.0	Dk. green to black Gila cong. Good Cu sh. Fair penetration	1.71
0	121.0	5.0	Dk. green to black Gila Cong. Good Cu sh. Fair penetration	2.50
(21.0	126.5	5.5		2.19
126.5	131.5	5.0	Dk. green, black & tan Gila Cong. Good Cu show. Fair pen.	2.36
	136.5		Dk. green with tan Gila Cong. Good Cu show. Fair pen. Good colors at 136.0'	2.35
136.5	141.5	8 6	Dk. green, black Gilz Cg. Very good Cu show. Good pen.	5.96
	147.0		Dk. green, very black Gila Cg to 146.0'. Very good Cu show Good penetration. 146.0' tan clay seen come in	2.96
47.0	152.0		149' clay, tan seam out. Br. alt bedrock mica	.20
32.0	157.0		Mixed alt bedrock with green banded bedrock. Mica	.16
157.0	162.0		Green, gray banded bedrock. Mica	.19
162.0	167.5		Green, gray banded bedrock. Mica	.18

• EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property:	Emerald Isle		Coordinates:	50,822 N 50,480 E
Type of Drill:	WD DD R		Inclination:	
Hole No.: I	DH #3		Collar Elev:	205.0
Date Drilled;	3/3/66 Started	1:00 p.m.	Logged By:	HWH

Completed 3:30 p.m.

FROM TO		TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		ASSAY			
0	22		Recent aluvium tan to brown				
22	24		Gila Cgl. No sample				
24	29	5.0			2.92		
29	34	5.0	Tan to light Gr. Gila CgV. Good Cu Good Penetration		3.42		
34	39	5.0	Tan to light Gr. Gila Cg. Good Cu sh. Good Penetration		2.74		
39.0		5.5	Tan, light Gr. Gila Cg. Gd. Cu show. Fair Penetration		2.18		
44.5	11	5.0	Tan, Gray Gila Cg. Gd, Cu. Sh. Fiar Penetration		2.39		
49.5		5.0	Tan, gray Gila Cg. Fair. Cu. Good Penetration		1.49		, i
54.5	59.5	5.0	54.5 to 57.0 Gila Cg. 57' altered Enessie material		2.49		
			Good Cu. Good Penetration				
59.5	65.0	5.5	Altered Gnessie material, greenish. Tr. Cu. Good Penetration		1.64		
65.0	70.0	5.0	Greenish, altered, gnessie material. Tr. Cu. Good Pent.		.64		
70.0	75.0	5.0			.51		
75.0	80.0	5.0			.47		
80.0	85.5				1.08		
85.5	*		0		.38		
			Light tan to Br. altered igneous material. Tr. Cu.				
			Good Penetration			<i>.</i>	
90.5	95.5	5.0					
95.5							
,		0.0	hardening. Moisture in sample. Poor Pent.				
100.5	106.0	5.5					
100.0	100.0	5.5	Greenish, gray, bedrock. Ground fine. Hard xh slow penetration. No Cu. sh Moisture in hole		.09		
i			penetration. No cu. sn Motsture m note				

• EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

	Property:	Emerald Isle		Coordinates:	50,675 N 50,354 E	
	Type of Dril.	1: WD	DD RD	<u>x</u> co	Inclination:	JU, JJ4 E
	Hole No.: D	H #4			Collar Elev:	188.0
1	Date Drilled	: 3/4/66	Started	8:00 a.m.	Logged By:	HWH

Completed 3:30 p.m.

-					
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	
0	46.0		Recent aluvium. Very Hd. Bld. at 42" to 45'		
46	49.5	3.5		1.08	
49.5	54.5	5.0		1.79	
54.5	59.5	5.0	Tan, brown, iron stained Gila Cg. Tr. Cu., softer drilling. Good Pent.	.67	
59 .5	65.0	5.5	Tan, to gray Gila Cg. HH. Hd & Soft. Fair Cu. Fair Pent.	1.69	
65.0	70.0	5.0		2.89	
70.0	75.0	5.8	Gray to Black Gila Cg. A.H. Hd to soft.V.Good Cu. Fair Pent.	4.73	
75.0	80.0	5.0	Tan to gray Gila Cg. AH Hd. to sf. Fair cu. Fair Pent.	1.69	
80.0	85.5	5.5	Tan to Br. Gilz Cg. Hd. Fair Cu Fair Pent.	1.43	
85.5	90.5	5.0	Tan, Gr to Black Gila Cg. Hd. Fair Cu. Fair Pent.	1.48	
90.5	95.5	5.0		5.55	
95.5	100.5	5.0	Gray to black Gila Cg. Soft. Good Cu. Good Pent.	2.09	
100.5	106.0	5.5	Tan to gray Gila Cg. Soft. Good Pen. Fr. Cu.	.50	
106.0	111.0	5.0	Tan & gray Gila Cg. Soft. Good Pen. Fair Cu.	1.24	
	116.0	5.0	Tan to gray Gila Cg. Soft. Good Pen. Fr. Cu.	1.35	
	121.0	5.0		.66	
r.	126.5	5.5	Tan, Brown altered, Gila Cg. as bedrock. Good Pen. Tr. Cu. soft material. Moisture contact 122.0	. 32	
	131.5	5.0	Light tan, whole altered, igneous granitic material. Highly altered Moisture. Tr. Cu. Soft. Good Pen.	d .31	
	136.5	5.0	Tan to Br. altered bedrock. Igneous granitic material. Fair Pent. Tr. Cu.	.16	
136.5	141.5	5.0	Fresh light tan to white granitic material. Hd. Fair Pent. Mica abundant quantz.	.14	
141.5	147.0	5.5			
			blue gnessic material. Very Hd. Banded	.09	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Em	erald Isle			Coordinates:	50,653 N 50,480 E
Type of Drill:	WD DD	RD <u>x</u>	CD	Inclination:	•
Hole No.: D	H #5			Collar Elev:	193.0
Date Drilled:	3/4/66 Start 3/7/66 Comp.	~		Logged By:	Н₩Н

FROM	то	TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		Assay		
0	44.0		Recent aluvium. Casing set to 13.0'		i	
44.0	49.0	5.0		1.02		
49.0	54.0	5.0		.69		
54.0	59.0	5.0		.79		4
59.0	64.0	5.0		.65		
64.0	69.0	5.0	Hard, Wh. highly silicified zone 64' - 68'. Much quartz. Iron stained 68-69. Black to gray Gila. Cu. Fair. Slow pen. 64-68	1.34		
69.0	74.0	5.0		1.27		
74.0	79.0	5.0		.95		
79.0	84.0	5.0		1.24		
84.0	89.0	5.0		.51		•
89.0	94.0		Green altered gnessic igneous material at 89.0' to 94.0. Soft. No Cu sh.	.13		
94.0	99.0		Hd. gnessid, igneous material. Bedrock Greenish-gray, Qts fresh. Numerous qts fragments in cuttings. No Cu sh.	. 18		
99.0	104.0		Greenish, gray gnessic igneous material. Bedrock. Qts. chips numerous Mica. Fresh material. No Cu.	.16		
	. I	I I		•	1	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	Property: Emerald Isle		Coordinates:	50,654 N 50,662 E
∵sk-	Type of Drill: WD]	DD RD CD	Inclination:	
	Hole No.: EP #6		Collar Elev:	199.0
		Started 11:15 am Completed 2:45 pm	Logged By:	Н₩Н

	}	FT.		ASSAY		
FROM	ТО	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			
0	64		Recent aluvium - Hd. Boulder 56 to 59'. Soft very brown seem 59-61 feet. Qts. chips white 61-64 (Composite sample 0 to 64)	. 36		
64	69	5.0	Altered green gneissic material. Soft. Good Pent. Tr. Cu.	. 33		
69	74	5.0	Altered green gneissic material. Soft. Good Pent. No. Cu.	.26		
74	79	5.0	Tan, igneous material (probably granite) Ots. hard. No Cu.	.14		
79	84	5.0	Tan to brown altered igneous material (granite). Ots. iron	.11		
8xxx	X89	500	stained. Harder with numerous qts chips. No Cu	• • • •		
84	89	5.0	Gray to greenish blud gneissic granite. Hard. Slow Pen. No Cu. Silicified fresh material	.13	L,	
89	94	5.0	Gray, greenish blue gneissic granite. More qts. Hard. Slow Pen. No Cu. Silicified. Sulphides noted. Fresh	.11		
94	99	5.0	Gray, greenish blue gnessic granite. Silicified. Very hd. No Cu	.09		
99	104		Gray, greenish blue, gneissic granite. Silicified. Very Hd.	.13		
			No Cu.			

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates: 50,802 N 50,770 E
Type of Drill: WD DD RD x CD	Inclination:
Hole No.: EP #7	Collar Elev: / 10 209.0
Date Drilled: 3/7/66 3:15 p.m. started	Logged By:

Date Drilled: 3/7/66 3:15 p.m. started 5:15 p.m. completed

		FT.		ASSAY
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	•
0	44	44	Recent aluvium. Sampled 24-44.0	. 33
				. 33
				. 37
11.0				.68
44.0			Tan to gray Gila Cgl. Cu Sh. Fair Pent. Contact	1.03
49.0	1		Gray to black Gila Cg. F.Cu. Show. Hd. Fair Pent	1.88
54.0	1		Gray to black Gila Cg. F. Cu. Show. Med Hd. Fiar Pent	1.45
59.0			Tan to gray Gila Cg. F. Cu. Show. Med H. Fair Pen.	1.24
64.0	1		Tan to gray Gila Cg. F.Cu. Show. Med. H. Fair Pen	.92
. 69.0	74.0		Tan Altered Igneous material Granite at 69.0 Med H. Fair Pen	.54
74.0	79.0	5.0	Brown, Altered, Granite. Iron stained. Soft. Good Pen.	.39
79.0	84.0	5.0	Brown, altered, Granitic material. Iron stained. Soft.Good Pen Greenish altered mat. 83.0'	.05
84.0	89.0	5.0	Brown, Highly altered Granitic material. Damp sample. Alteration to Clay. No Cu. Good Pen.	.03
89.0	94.0	5.0	Brown, altered. Gneissic, Granite. No Cu. Soft to 93.0 Hardening. Wet. and Damp Hole	.07
94.0	99.0	5.0	Brown Alt. Gneissic material. No Cu. Soft. Sample wet.	.13
99.0	104.0	5.0	Water at 99.5'. Brown, altered Gneissic Granite. No Cu. Soft.	.05

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property:	Emerald I	sle		Coordinates:	50,785 N 50,636 E
Type of Dri	11: WD	DD RD	<u>x</u> 00	Inclination;	
Hole No.:	EP #8			Collar Elev:	213.0
Date Drille	d: 3/8/66	started completed	8:30 am 11:00 am	Logged By:	Н₩Н

TID OV		FT.		ASSAY			
FROM	ТО	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	% Cu			
0	47.0		Recent aluvium. Sampled 240 - 44.0		0.32	Ave.	÷.
47.0	49.0	1	Gila Cong. Sampled 44.0 - 49.0 Cu. sh.		.73		
49.0	54.0	5.0	Tan, green, gray to black Gile Cg. Silicified. Cu sh. Fair Pen	·	1.94		
54.0	59.0	5.0	Br., gray, to black Gila Cg. Silicified. Cu Good. Hd. Fair Pen		1.23		
59.0	64.0	5.0	Tan, Br. to black Gila Cg. Very black 61-62. Good Cu. Hd. Silicified. Fair Pen.		1.37	-	
64.0	69.0	5.0	Br. Gray to Black Gila Cg. Iron Stained Cuttings 67-69.0 Cu Sh. Highly Silicified. Hard. Fr. Pen.		1.08		
69.0	74.0	5.0	Br. Gr. to Black Gila Cg. to 73.0. Altered Brown, Iron Stained Igneous Material 73 to 74.0 Fair Cu. Hd. Fr. Pen.		1.08		
74.0	79.0	5.0	Black to Br. Highly Silic. Qtx cutting. slum. No Cu. Show Softrs. Good Pen. Gila Cong.		0.62		
79.0	.84.0	5.0	Black, Br. to Tan. Gilz Cg. Highly Silicified. Much Qts in Cuttings. Hard. Fair Penet. Tr. Cu in Cuttings		0:51		
84.0	89.0	5.0	Brown, Black to Gray Gila Cong. Highly Silicified. Fair Cu. Show. H.H. Fair Pen.		2.08		
89.0	94.0	5.0	Gila Cg. Br to Black to 92.0. 93.0-94. Greenish Altered Gn essic Granite. Fair Pen.	·	0.30		
94.0	99.0	5.0	Altered. Greenish-Blue Gnessic material. No Cu sh. Mica Fr. Pen. Greenish		0.15		
99.0	104.0	5.0	Blue-Green Gnessic material to 102.0. 102-104 Br Highly Alt. material Gnessic Gr. Sample Damp. Mica Water in Hole shen starting from 104.0'		0.21		

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Em	erald Isle			Coordinates:	50,865 N 50,277 E
Type of Drill: W	_ ממ מ	RD x	CD	Inclination:	
Hole No.: EP #9	(Sheet 1 of	2)		Collar Elev:	192.0
Date Drilled:	3/8/66 3/9/66	started completed	11:30 am 3:30 pm	Logged By:	HWH

FROM		FT.		•	ASSA	Y	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	9	% Cụ.		
0	13.0	13.0	Boulders rolling in hole. Abandoned. First try				
0	64.0	64.0	Tools trapped in hole. Abandoned. Second try				1
0	109.0	109.0					
109.	114.0	5.0	Tan, Brown Black Gila Cg. Hard. Much Qts. Highly Silicified. Cu. Tr. Fair - Fair Pent.	a	.99		
114.0	119.0	5.0	Tan, Br. to Black Gilz Cg. Hard. Numerous Qts. cuttings				
			silicified. Fair Cu. Sh. Fair Pen.	0	. 88		
119.0	124.0	5.0	Tan, Gr. to Black. Hd. Gila Cg. Highly Silicified. Rixx Fair				
•	1		Pent. Good Cu. Sh. Softer Bottom 2' feet	0	. 88		
124.0	129.0	5.0			.14		
129.0	134.0	5.0	Tan, Gray to Black with Iron St. Qts. Gila Cg. Good Pent.				
			Softer Form. Good Cu. Sh.	0	. 81		
134.0	139.0	5.0	Tan, Gray, to Black Gila Cg. Good Pent. Fair Cu. Sh.		.60	-	
139.0	144.7	5.7'	Tan, Gray to Bl. Gila Cg. Fair Pen. Tr. Cu. Iron Stained Qts		.31		
		8	Cuttings.				
144.7	149.7	5.0	Tan, Gray to Black Gila Cg. Fair Pen. Tr. Cu. Iron Dy				
			Stained Altered Clay particles noticed	10	.42		
149.7"	154.7	5.0	Tan to Black Gilz Cg. Fair Pen. Tr. Cu.	1	. 83		
154.7"	159.7'	5.0	Gray to Black Gila Cg. Some Iron Staining. Fair Pen. Good Cu.		.71		
159.7	165.2"	5.7'			.68		
			Bottom of Run. Tr. Cu.				
165.2	170.2	5.0	Brown to Balck Grizza Gila Cg. Iron Staining. Sample Damp.	σ	. 83		
			Tr. Cu. Change to Br. at 167.0				
170.2	175.2	5.0	Same as above	1	.12		
175.2"	180.2	5.0	Highly Silicified. Tan to Black Gila Cg. @ts. Iron Stained		.70		
			Tr. Cu.				
180.2	185.9	5.7	Tan, with some Black Gilz Cg. Iron Stained. Tr. Cu.	0	.68		
185.9	190.9	5.0	Gila Cg. to 187.0. Clay Seam 187.0-189.0 Brown, highly		. 30		
•			altered or weathered igneous material. No Cu. Sh. Soft				
190.9"	195.9	5.0	Altered, weathered, granitic material. Tr. Cu. Br. Ir.	0	. 22		
			Stained Qts.				
					•		

19 2 No.

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isle	Coordinates:
Type of Drill: WD DD RD CD	Inclination:
Hole No.: EP #9	Collar Elev:
Date Drilled: 3/9/66	Logged By: HWH

FROM	ТО	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
195.9	200.9	5.0	Altered weather, brownish granitic material. No Cu. Iron St. Qtz.	0.19
200.9	206.4	5.7	Brownish, alt. weathered granitic material. Kaolonite in cuttings. No Cu Soft	0.22
206.4	211.4	5.0	Brown, highly weathered granitic material. Kaolonite visible No Cu visible. Soft.	0.30
	221.4	5.0 5.0	Same as above Same as above	0.27 0.29
ч <i>ы</i> ль, 1	226.11	5.7	Same as above to 222.5' Last 3' of cutting hardening. Blue green gneissic granite. Fresh appearance No Cu visible	0.10
•				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property:	Emerald Isle			Coordinates:	50,870 N 50,575 E
Type of Drill	L: WD DD		CD	Inclination;	
Hole No.: E	P #10			Collar Elev:	197.0
Date Drilled		Started	8:30 am	Logged By:	HWH

Completed 12:00 noon

TID OV	-	FT.		ASSAY	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	Cu	
0.0	3.0	3.0	Tan to Gray Gila Cg. Tr. Cu	1.10	
3.0	8.0	5.0	Gray, Tan Gila Cg. Fair Cu. Fair Pent	0.69	
8.0	13.0	5.0	Tan, Gray, Gila Cg. Some Iron Staining. Good Cu. Good Pen.	3.08	
13.0	18.5	5.5	Gray, Tan Gila Cg. Some Iron Staining. Dood Cu. Fair Pen	2.68	
18.5	24.0	5.5	Gray, greenish, Gila Cg. Good Cu. Hard. Fair Pen	3.62	
	29.0	5.0	Gray, Black, Tan Gila Cg. Iron Staining. Hard. Fair Pen. V. Good Cu.	2.49	
	34.0	5.0	Brown to Tan Gila Cg. Iron Staining. Fair Cu. Fair Pen.	1.22	
34.0	39.0	5.0	Brown to Black Gila Cg. Much Iron Staining. Fair Cu. Soft. Good Pen	0.49	
	44.0	5.0	Brown, Black Gila Cg. Much Iron Staining. Tr. Cu. Good Pen. Soft	0.41	
44.0		5.0	Gila Cg. to 45.0. 45.0 to 49.0 Tan, Brown altered, weathered Igneous material. Granitic. No Cu. vis	0.07	
49.0	54.0	5.0	Weathered, Granitic material to 51.0. Gray, gneissic granite, highly silicified to 54.0. Iron Stained. No Cu vis	0.07	
· *.0	59.0	5.0	Gray to greenish gneissic granite. Iron stained. No Cu vis	0.10	
59.0	64.0	5.0	Same as above to 62.0 - 62.0-64.0 - Fresh greenish and white banded gnessic granite. No Cu Vis.	0.13	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	DRILL HOLE	LOG	EO 960 M
Property: Emerald Isle		Coordinates:	50,868 N 50,679 E
Type of Drill: WD D	DRD_x_CD	Inclination:	
Hole No.: EP #11	• •	Collar Elev:	198.0
	tarted 1:00 pm completed 3:00 pm	Logged By:	HWH

		FT.		ASSAY	
FROM	ТО	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	Cu	· .
0.0	3.0	3.0	Set casing in overburden		
3.0	9.0	6.0	Recent overburden and aluyium	0.23	
9.0	14.0	5.0	Recent Al.	0.28	
14.0	19.0	-5.0	Recent Aluy.	0.31	
19.0	24.0	5.0	Recent Aluy.	0.36	
24.0	29.0	5.0	Recent aluy. to 25.0 contact. Tan, Gray with Black Gila Cg.	2.80	
			Fair Pent. Fair Cu		
29.0	34.0	5.0	Tan, Gray to Black Gila Cg. Good Cu	2.52	
34.0	39.0	5.0		2.75	
	44.0	5.0	Tan, Gray, Black Gila C. Fair Cu. Hd. Fair Pen	1.51	
	49.0	5.0		1.77	
49.0	54.0	5.0		1.74	
			Iron Stained, Granite, Weathered and altered		
	59.0	5.0		0.70	
	64.0	5.0		0.18	
1	69.0	5.0		0.09	
	74.0	5.0		0.05	
74.0	79.0	5.0		0.04	
			gnessic material. Highly silicified. Hd. No Cu		ŝ
79.0	84.0	5.0	Fresh bluish gray gneissic material. No Cu.	0.04	
	. •				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Eme	erald Isle	* *		Coordinates:	50,879 N 50,759 E
Type of Drill:	WD DD	RD <u>x</u>	CD	Inclination:	
Hole No.: EP	#12			Collar Elev:	198.0
Date Drilled:	3/10/66 3/11/66	Started Completed	3:45 pm 9:45 am	Logged By:	HWH

	1	FT.		ASSAY	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS		
0	21	21	Recent aluvium. Gila Cg. 21-24		
21	24	3	Sampled 19'-24.0' 19-24	1.16	
24	29.0	5.0	Tan, Gray to Black Gila Cg. Good Cu.	1.10	
29.0	34.0	5.0	Gray to Black Gila Cg. Good Cu.	1.03	
34.0	39.0	5.0	Tan, to Gray Gila Cg. Fair Cu. Hd.	.55	
39.0	44.0	5.0	Tan, to Gray Gila Cg. Hard Good Cu	.85	
44.0	49.0	5.0	Tan to Gray Gila Cg. Hard. Good Cu.	.91	
49.0	54.0	5.0	Brown altered, weathered igneous type material at 52.0 Copper Sh. Soft Contact 52.0	.99	
54.0	59.0	5.0	Brown, altered, weathered igneous mat. Granitic	. 26	
59.0	64.0		Altered geneissic granite to 61.0. 61.0-64.0 Fresh Blue gray, to greenish bedrock	.09	
64.0	69.0		Alternating soft, brown weathered streaks of gnessic material with fresh blue-gray to greenish gnessic granite Mica	.07	
69.0	74.0		Hd. blue, green and gray gnessic granite. Mica plentiful	.07	

Property: Emerald Isle

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

50,985 N Coordinates: 50,775 E

Type of Drill:	WD	DD RD	<u>x</u> CD	Inclination;	*
Hole No.:	EP #13			Collar Elev:	212.0
Date Drilled:		Started Completed	10:30 am 2:00 pm	Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	-	ASS	ΥY	
0.3	3.0	3.0	Casing Set. Recent overburden				
3.0	9.0	6.0	Recent aluvium - sampled		.27		
9.0	14.0	5.0	Recent aluvium - sampled		.42		ł
14.0	19.0	5.0	Contact of Tan, Iron Stained Gilz Cg. at 14.0'. Cu. showing		1.03		
19.0	24.0	5.0	Brown, Tan with Black Qts Gila Cg. Copper visible		.48		
24.0	29.0	5.0	Brown, Tan, with Black Qts particles. Plentiful Gila Cg. Good Cu. vis		.94		
29.0			Tan to Brown Gila Cg. Fair Cu. visible		1.39		
34.0	39.0	5.0	Tan to Br. Gila Cg with rich alt. black streaks. Hd. Good Cu.		.90		
39.0	44.0	5.0	Tan to Br. Gila Cg. with alt. rich black streaks. Very good Cu Hd. Soft very Br. streak at 43.0 feet	•	1.34		
44.0	49.0	5.0	Hd. Tan to Br. very silicified boulder. Black streaks carrying Cu. Fair Cu in sample. Gila Cg. Granitic in appearance		. 45		-
49.0	54.0	5.0	Very Hd. Tan to Brown, highly silicified Gila Cg. Tr. Cu vis. Granitic in appearance		. 25		
54.0	59.0	5.0	**	1997 - 19	.24		
59.0	64.0	5.0	Soft at 60'. Brown, weathered, highly iron stained granitic material. Contact 60.0 Tr. Cu. Sample Damp		.17		
64.0	69.0	5.0		:	.14	r	
69.0	74.0	5.0	Same as above to 73.0. Gnessic granite weathered at 73.0. Cu visible		.13		
74.0	79.0	5.0	Gnessic granite, heavily iron stained. Tr. Cu.		.11		
79.0	84.0	5.0		,	.08		
84.0	89.0	5.0	Blue, gray, fresh gnessic material. Contact 85.0 Mica		.15		
89.0	94.0	5.0			.07		
. 1							

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Is	le	Coordinates:	50,880 N 50,852 N
Type of Drill: WD		Inclination;	
Hole No.: EP #14		Collar Elev:	211.0
Date Drilled: 3/11/66	Started2:30 pmCompleted4:15 pm	Logged By:	HWH

ROM	то	FT. DRILL	DESCRITON OF MAMPETAL AND DEMADES	ASSAY	· · · · · · · · · · · · · · · · · · ·
C NOM		DRILL	DESCRIPTION OF MATERIAL AND REMARKS		
0.0	4.0	4.0	Set casing to 3.0. Recent aluvium. Sampled Cu vis.	. 39	
4.0	9.0	5.0	Recent aluvium. Smp.	.18	
9.0	14.0	5.0	Hd Boulder Granite 9-10.0. Recent aluvium. Sampled	. 26	
14.0	19.0	5.0	Recent aluvium. Sampled	.24	
19.0	24.0	5.0	Recent aluvium. Sampled	.37	
24.0	29.0	5.0	Recent aluvium. Sampled	.46	
29.0	34.0	5.0	Recent aluvium. Sampled	.59	
34.0	39.0	5.0	34.0-38.0 Recent Al. 38.0-39.0 Tan Gila Cg. Cu. Sh.	.79	
39.0	44.0	5.0	Tan, gray, to black Gila Cg. Hd at Bottom. Cu. Show	.88	
44.0	49.0	5.0	Tan, Gray to black Gila Cg. Hd. Good Cu.	1.18	
49.0	54.0	5.0		.90	
54.0	59.0	5.0	Gray, to black Gila Cg. Hard. Good Cu	1.16	
59.0	64.0	5.0		1.35	
64.0	69.0	5.0	Light gray to tan Gila Cg. Hd. Good Cu	.96	
69.0	74.0	5.0	Gila to 70.0. Altered, weathered, highly iron stained, brown	.49	
			granitic material. Contact 70.0. Softer at 70.0		
74.0	79.0	5.0	Brown altered, watk weathered gnessic granite. No Cu. vis.	.18	
			Strongly iron stained		
79.0	84.0	5.0	Same as above	.10	
84.0	90.0	6.0	Gray. to blue, highly silicified gnessic granite	.04	
		I I			

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

			50,963 N
Property: Emerald Is	le	Coordinates:	50,910 E
Type of Drill: WD	DD RD x	CD Inclination;	
Hole No.: EP #15		Collar Elev:	213.0
Date Drilled: 3/12/66) am Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	······································
0 3.0 9.0 14.0 19.0 24.0 29.0 34.0 39.0 44.0 49.0 54.0	3.0 9.0 14.0 19.0 24.0 29.0 34.0 39.0 44.0 49.0 54.0 59.0 64.0	3.0 6.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	Set casing. Rc. aluvium Recent al. Smpd Rc. aluvium. Sampled Rc. aluvium. Sampled Rc. aluvium. Sampled Rc. aluvium Recent aluv - Tr. Cu Recent aluvium. Tr. Cu Tan to gray Gila Cg. Fair Cu. Contact at 40.0 Gray, highly silicified Gila Cg. Hd. Fair Cu. Iron stained Same as above Tan to gray Gila Cg. to 58.0 - 58.0-59.0 highly silic. igneous rock Gray, quartzitic, gnessic granite. Fresh. No Cu vis	- .26 .32 .32 .48 .78 .56 .44 .43 .71 .24 .11	
64.0	70.0	6.0	Gray to bluish, quartzitic, gnessic granite. Fresh	.07	

Property:

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas <u>DRILL HOLE LOG</u> Coordinates;

50,838 N 50,975 E

•	·					
	Inclination:	x CD	DD RD	WD	of Drill:	Туре
203.0	Collar Elev:			#16	No.: DH	Hole
HWH	Logged By;	10:15 am 12:00 noon	Started Completed	/12/66	Drilled: 3,	Date

Emerald Isle

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASS.	AY
				1	•
				·	
0	3.0	3.0	Set casing		
3.0	9.0	6.0	Recent overburden	.38	
9.0	14.0	5.0	Recent overburden	.46	
14.0	19.0	5.0	Recent overburden. Boulder 17-19'	.41	1 1
19.0	24.0	5.0	Recent overburden	.36	1 1
24.0	29.0	5.0	Recent overburden	.31	1 1
29.0	34.0	5.0	Recent overburden (2)	.45	
34.0	39.0	5.0	Gila Cg contact at 35.0 Tan with black staining on pebbles. Tr (Difficult to spot	Cu .68	· · ·
39.0	44.0	5.0	Same as above. Tr. Cu. Gila Questionable	.64	
44.0	49.0	5.0		.33	
49.0		5.0	Gila Cg. tan, to 52'. Iron stained granitic material at 52'.	. 28	1 1
54.0	59.0	5.0	Altered greenish gnessic granite. Iron stained	.22	
59.0	64.0	5.0	Alternating green gnessic granite, & granitic material with		
			Qts plentiful Bluish-gray soft gnessic material. In at 62.0'	.11	
64.0	.70.0	6.0			

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

50.939 N

Property: Emerald Isl	9	Coordinates:	51,022 E
Type of Drill: WD	DD RD x	CD Inclination;	
Hole No.: EP #17		Collar Elev:	205.0
Date Drilled: 3/12/66		0 pm Logged By: H 0 pm	ĪWH

FT. ASSAY FROM TO DRILL DESCRIPTION OF MATERIAL AND REMARKS 3.0 0.0 3.0 Set casing 3.0 9.0 6.0 Recent aluvium 1.07 9.0 14.0 5.0 Contact 10' of Gila Cg. gray to black with iron staining. 1.72 Good Cu. Poor sample in volume 14.0 19.0 5.0 Tan, Gray to Black Gila Cg. Iron stained. Good Cu. 1.62 Poor sample in volume 19.0 24.0 5.0 Tan, Gray to Black Gila Cg. Very Good Cu to 22.0' 1.46 22.0-24.0. Very Hd. Bld. Slow pen. 24.0 29.0 5.0 Tan, Brown to Black (numerous chips) Gila. Very Good Cu. 1.07 29.0 34.0 5.0 Tan, Brown, to Black (numerous chips) Gila Ca. V. Good Cu 1.15 34.0 39.0 Brown to Black Gila. Goo Cu. Altered granitic material Tan. .99 Iron stained at 38.0 39.0 Brown, heavily iron stained, altered, weathered. Granitic Mater. 44.0 5.0 .24 Tr. of Cu. Damp sample 44.0 Brown, heavily iron stained, altered, weathered gnessic granite 49.0 5.0 .12 Tr. of Cu. Sample very damp 49.0 54.0 5.0 Same as above .11 Same as above to 58.0. Blue, gray, granific material in at 58.0 54.0 59.0 5.0 .07 59.0 64.0 5.0 Blue, gray, quartzific, material to bottom. Gnessic appearance .10 Slightly iron stained

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	DRILL	HOLE	LOG	•
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Property: Emerald Isle	50,820 N Coordinates: 51,189 E	
Type of Drill: WD DD RD OD	Inclination;	
Hole No.: EP #18	Collar Elev: 🛷 218.0	
Date Drilled: 3/12/66 started 3:00 pm	Logged By: HWH	

completed

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASSA	Y.	
0.0	3.0	3.0	Set casing				
3.0	9.0	6.0	Recent aluvium	1	.09		
9.0	14.0	5.0	Recent aluyium		.37		
14.0	19.0	5.0	Recent alubium		.37	<i>2</i> -	
19.0	24.0	5.0	Recent aluvium. Poor volume of sample	1	.39		
24.0	29.0	5.0			.33		
			Tr. of Cu				
29.0	34.0	5.0	Tan, much black Gila Cg. Fair Cu.		.59		
34.0	39.0	5.0			. 39		
39.0	44.0		, , ,		.35		
			Gnessic granite at 42. Silicified				
44.0	49.0	5.0		1 × 1	.18		
			Brown, much altered 47-49.0		.10		
49.0	54.0	5.0		19	24		
54.0	59.0	5.0	Brown, heavily iron stained gneissic material. Damp sample		.24		
59.0	64.0		, and been been matched and ballip.		.18		
			damp sample	1	.10		
					- Provincial State		

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	Proper	rty:	DRILL HOLE LOG50,732 NSWrong?Emerald IsleCoordinates: 51,973 E50,973 JRR	
	Туре о	of Dril	1: WD DD RD x CD Inclination:	
	Hole 1	10.: E	Collar Elev: 207.0	
			:3/13/66 Started 7:30 am Logged By: HWH	
			Completed 9:30 am	-
FROM	TO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	
0.0	3.0	3.0	Set casing	
3.0	9.0	6.0		
9.0	14.0	1 1	Recent aluvium. Sampled .18 Recent aluvium. Sampled .15	
14.0	19.0		Recent aluvium. Sampled .13	
19.0	24.0		Recent aluvium. Sampled .35	
24.0	29.0		Recent aluvium. Sampled	
29.0	34.0	5.0	Recent aluvium. Sampled .44	
34.0	39.0			
39.0	44.0		Recent aluvium. Sampled. Gila Cg. at 38.0. Tan. Tr. Cu50Tan, Black, stained. Gila Cg. Tr. Cu.57	
44.0	49.0	1	Tan, black stained. Gila Cg. Fair Cu .53	
49.0	54.0	5.0	Tan, black stained. Gila Cg. Fair Cu .48	
54.0	59.0	5.0	Tan, Black stained Gila Cg. Fair Cu	
59.0	64.0	5.0	Gilz Cg to 60.0. Contact altered green to tan gneissic	
64.0	60.0	50	granite. Much mica. Iron stained	
69.0	69.0 75.0	5.0	Greenish altered gnessic granite. strongly iron stained .18	
09.0	/5.0	6.0	Same as above to 70.0. at 70.0 Blue to gray fresh gneissic .09 granite. Mica.	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: E	merald I	sle		Coordinates:	50,846 N 51,312 E
Type of Drill:	WD	DD RD	<u>x</u> CD	Inclination:	
Hole No.:	EP #20			Collar Elev:	220.0
Date Drilled:3/	/13/66	started completed	10:15 am 11:15 am	Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
$\begin{array}{c} 0.0\\ 3.0\\ 9.0\\ 14.0\\ 19.0\\ 24.0\\ 29.0\\ 34.0\\ 39.0\\ 44.0 \end{array}$	3.0 9.0 14.0 19.0 24.0 29.0 34.0 39.0 44.0 50.0	5.0 5.0 5.0 5.0 5.0 5.0	Casing set Recent aluvium. Sampled Contact of Gila Cg. at 9.0' Gray to Black Gila. Good Cu. Gray to black. Iron stained Gila. Good Cu Tan, altered, brown Gila Cg. Fair Cu Brown, highly iron stained, granitic material. In at 25.0 Brown, highly iron stained granitic material Brown, highly iron stained granitic. Kaolonite Brown, highly altered granite to 43.0. Fresh gr. at 43. Iron stained Brown, iron stained, granite	.44 1.88 .53 .18 .11 .13 .18 .11 .08

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Is	le		Coordinates:	50,985 N 51,172 E
Type of Drill: WD	DD RD	<u>x</u> ^{od}	Inclination:	
Hole No.: EP #21	•		Collar Elev:	215.0
Date Drilled: 3/13/66	started completed	11:45 am 3:15 pm	Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASSA	Y	
0.0	3.0	3.0	Set casing			1	
3.0	9.0	6.0	Unable to sample. Boulders				
9.0	14.0		Sampled. Recent Al.				
14.0	19.0		-		04		-
19.0	24.0	5.0		'	"	1	
24.0	34.0	10.0			•		
			completely covered with mud. Appears to be aluvium. May be poor sample. Poor circulation in hole due to constant caving above. Finally cleaned hole but circulation not restored.				
• 34.0	39.0	1. 8	Unable to identify sample. Sample still wet				
39.0	44.0	5.0	Unable to identify sample. Sampled. Still wet		"		
			Hole caved 10' fet. Only could get rods into 34.0 feet. Bottomed.				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: En	nerald Isle			Coordinates:	50, 575 N 50, 416 E
Type of Drill:	WD	DD RD	<u>x</u> CD	Inclination:	
Hole No.:	EP #2	2	; ;	Collar Elev:	189.0
Date Drilled;;	8/13/66 8/14/66	started completed	4:00 pm 9:15 am	Logged By:	HWH

TROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	
0.0	13.0	13.0	Set casing. Sampled	.04	
13.0	18.0	5.0	Recent aluvium. Sampled	.13	
18.0	24.0	6.0	Recent aluvium. Sampled	.24	
24.0	29.0	5.0	Recent aluvium. Sampled	.22	
29.0	34.0	5.0	Recent aluvium. Sampled	.33	
34.0	39.0	5.0	Recent aluvium. Sampled	.26	
39.0	44.0	5.0	Recent aluvium. Sampled	.30	
44.0	49.0	5.0	Recent aluvium. Sampled	.42	1
49.0	54.0	5.0	Recent aluvium to 51.0. Contact of Gila cg. at 51.0	.77	
•			Tan to gray Gila cg. Good Cu		
54.0	59.0	5.0	Tan, gray Gila cg. Very Hd highly silicified. Tr. Cu	.31	
59.0	64.0	5.0	Tan to gray Gila cg. with alternating hd. and soft streaks	.30	
			Bottom 2 feet very black. Very good Cu. last 2'. Good Cu for		
			5'		
64.0	69.0	5.0	Tan, gray, with much black Gila cg. Very Gd. Cu.	.77	
69.0	74.0	5.0	Tan, tray to black Gila cg. Softer. Good Cu	.59	
74.0	79.0	5.0	Tan Gila cg. Very hd boulder 77' to 79'. Tr. Cu	.44	
79.0	84.0	5.0	Tan, gray with black, some green, Gila Cg. Good Cu	.77	
			Green material is gneiss. Much softer		
84.0	89.0	5.0	Green, altered gnessic granite. Soft. contact 84.0	.66	
89.0	94.0	5.0	Green to Bl. altered weathered gnessic Gr. Tr. Cu	.28	
94.0	99.0	5.0	Green to black gnessic granite. Highly iron stained	.33	
99.0	104.0	5.0	Same as above to 102.0. 102' to bottom, fresh green is blue	.08	
			to gray gnessic granite. Qts stringers. Same as core.		
	5				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

CD

10:00 am

RD X

Emerald Isle Property:

51,045 N Coordinates: 50,506 E

Inclination:

209.0

Hole No.: EP #23

Type of Drill: WD ___ DD __

Date Drilled: 3/14/66 started 3/15/66 completed

HWH Logged By: 10:15 am - Shut down on 3/14/66 at 3:00 pm to replace fuel pump

Collar Elev:

			Teplace Idel pullp		
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	
	14.0	14.0			
0	1.	/\$9x9		.20	
14.0	19.0			.24	
19.0	24.0			.30	
24.0	29.0			.39	
29.0	34.0	5.0	Recent aluvium. Sampled	.11	
34.0	39.0			.39	
39.0	44.0			.37	
44.0	49.0		• •	.43	
. 49.0	54.0	5.0	Recent aluvium. Sampled. Fine Sand. Mudded sides of hole at 54.0'	.28	
54.0	59.0	5.0	Recent aluvium. Sampled	.35	
59.0	64.0	5.0	Recent aluvium. Sampled	.35	
64.0	69.0	5.0	Recent aluvium. Sampled	.45	
69.0	74.0	5.0	Recent aluvium. Sampled. Very fine sand in at 74.0 Mudding hole	.38	
74.0	79.0	5.0	Recent aluvium. No circulation. Mudded Hole	.13	
79.0	84.0	5.0	Circulation return. Split sample for 10' interval. Recent al.	.15	
84.0	90.0	6.0		.46	
90.0	95.0	5.0	Contact 91.0 Tan, dark Gila Cg. Fair Cu	.80	
95.0	100.0	5.0	Dark, black Gila Cg. V. Good. Cu.	2.06	
100.0	105.0	5.0	Tan, gray, much black Gila Cg. Good Cu	.90	1
105.0	110.0	5.0		.77	
110.0	115.0	5.0	Same as above. Good Cu. Hit rock or fracture at 115.0	.74	
			Reduced circ. fine cuttings		
115.0	120.0	5.0	Reduced Cir. Very fine cuttings like blow sand. Stained black	.99	
			Reduced in sample. Mudding hole. Cu. show. Contact 114.	1 1	
120.0	125.0	5.0		.11	
125.0	130.0		Gray altered gnessic granite	.07	
	135.0		Very iron stained gnessic granite. Brown	.03	
135.0	140.0		Heavily iron stained gnessic granite	.05	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Is	le	Coordinates:	50,972 N 51,458 E
Type of Drill: WD	DD RD CD	Inclination:	
Hole No.: EP #24		Collar Elev:	204.0
Date Drilled: 3/15/66	started 12:00 noo completed 3:00 pm	n Logged By:	Н₩Н

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSA	Y
0.3	3.0	3.0	Set casing		
3.0	5.0	2.0	Recent aluvium. Sampled	. 23	
5.0	10.0	5.0	Recent aluvium	.22	
10.0	15.0	5.0	Recent aluvium	1.10	
15.0	20.0	5.0	Recent aluvium	.79	
į.	25.0	5.0	Recent aluvium	.39	
25.0	30.0	5.0	Recent aluvium	. 26	
30.0	35.0	5.0	Recent aluvium	.35	<u>.</u>
35.0	40.0	5.0	Recent aluvium	.33	
40.0	45.0	5.0	Recent aluvium	.48	
45.0	50.0	5.0	Recent aluvium	.57	
50.0	55.0	5.0	Recent aluvium	. 26	
55.0	60.0	5.0	Recent aluvium	.70	
60.0	65.0	5.0	Recent aluvium	.66	
65.0	70.0	5.0	Recent aluvium	.55	
70.0	75.0	5.0	Recent aluyium	.53	
75.0	80.0	5.0	Recent aluvium	.30	
80.0	85.0	5.0	Recent aluvium	.39	
85.0	90.0	5.0	Recent aluvium	.53	
90.0	95.0	5.0	Contact of Gila. Light tan at 91.0. Tr. Cu	1.07	
95.0	100.0	5.0	Light gray to tan Gila Cg. Very Hd. Good Cu	.71	
100.0	105.0	5.0	Very black Gila Cg. Very, very good Cu. Soft	3.34	
105.0	110.0	5.0	Hit drift at 110'. Very black to that point. Very Gd Cu	2.91	
		·	Highly iron stained, brown material in returns just before		
			rods dropped. Dropped rods 10' farther in hole with no		
			resistance. No circulation		
110.0	120.0	10.0	No sample. Open hole.		
		·		1	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property:	Emer	ald Isle		Coordinates:	51,131 N 50,536 E
Type of Drill	: WD	DD RD	<u>x</u> CD	Inclination;	
Hole No.:	EP #25	(Sheet 1 of 2)		Collar Elev:	215.0
Date Drilled:	3/15/66	started completed	3:30 pm 6:00 pm	Logged By:	HWH

	1	FT.			ASSA	v	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ROUR	11	
0.0 3.0 5.0	3.0 5.0 10.0	3.0 2.0	Recent aluvium		. 15		
10.0					.09		
	15.0				.07		
15.0							
20.0 25.0							
30.0							
35.0	8						
40.0	45.0			a.'			
45.0							
50.0	55.0						· · · ·
55.0	60.0			• 2			
60.0	65.0	5.0			. 20		
65.0	70.0	5.0	Recent aluvium		.16		
70.0	75.0	5.0	No return. Very fine sand, mudding hole for circulation		.13		
			Circ. return				
75.0	80.0	5.0	Recent aluvium		.22		
80.0	85.0	5.0	Dark Gray Gila Cg. Tr. Cu. Contact 80.0'		.34		
85.0	90.0	5.0	Black to Gray Gila Cg. Hard. Fair Cu.		.37		
90.0	95.0	5.0	Black to Gray Gila Cg. Hard. Tr. Cu.		.38		5
95.0	100.0	5.0	Black to Gray Gila Cg. Hd. Some Iron Staining. Tr. Cu.		.45		
100.0	105.0	5.0	Black to Gray Gila Cg. Softer. Some Iron Staining. Tr. Cu.		.26		
105.0	110.0	5.0	Same as above. Tr. Cu.		.30		
110.0	115.0	5.0	Same as above. Tr. Cu.		.30	•	
115.0	120.0	5.0	Same as above. Fair Cu		.30		
120.0	125.0	1 1	Same as above. Fair Cu		.42		
125.0	130.0	5.0	Same as above. Tr. Cu		.37		
130.0	135.0	5.0	Same as above. Tr. Cu		.53		
135.0	140.0	5.0	Same as above. Tr. Cu	1	.31		

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emeral	d Isle		Coordinates:	
Type of Drill: WI	DD RD	CD	Inclination:	
Hole No.: EP #25	(Sheet 2 of 2)		Collar Elev:	215
Date Drilled: 3/15	/66		Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY	
140.0 145.0 150.0 155.0 160.0	160.0 165.0 170.0	5.0 5.0 5.0 5.0 5.0 5.0	Brown altered gnessic granite. Kaolonite Brown altered gnessic granite. Kaolonite Greenish altered gnessic. Kaolonite	1.10 1.34 .37 .42 .30 .31 .13	
	131.0	6.0	To 180 altered gnessic material. At 180 fresh quartzite gnessic material	.09	
•	-				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,515 N 50,312 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #26	Collar Elev:	185.0
Date Drilled: 3/21/66 - Started 7:30 AM	Logged By:	H.W. Horst

Completed 9:00 AM

0.0 13.0 13.0 Recent Overburden, Set Casing to 13.0' 13.0 15.0 2.0 Recent Overburden 15.0 20.0 5.0 Recent Overburden 20.0 25.0 5.0 Recent Overburden 25.0 30.0 5.0 Recent Overburden 30.0 35.0 5.0 Recent Overburden 35.0 40.0 5.0 Recent Overburden 40.0 45.0 5.0 Recent Overburden 45.0 50.0 Scent Overburden		0.13	· · · · · · · · · · · · ·
 50.0 55.0 5.0 Tan with Black Gila Cg at 53.0 Contact Tr. Cu 55.0 60.0 5.0 Tan, Black Gila Cg. Tr. Cu 60.0 65.0 5.0 Tan, Black Gila Cg. Fair Cu 65.0 70.0 5.0 Tan, Black, Gila Cg. Fair Cu 70.0 75.0 5.0 Tan, Gray to Black Gila Cg. Good Cu 75.0 80.0 5.0 Tan, Gray to Black Gila Cg. Fair Cu 80.0 85.0 5.0 Tan, Gray to Black Gila Cg. Fair Cu 85.0 90.0 5.0 Black Gila Cg. Soft. Good Cu 95.0 100.0 5.0 Black, Gray Gila Cg. Fair Cu 95.0 100.0 5.0 Tan, Gray, Gila Cg. Fair Cu 105.0 100.0 5.0 Greenish altered Gnessic Granite 101.0 Soft for 2'. Greenish altered Gnessic Granite. Iron stained heavily 		.21 .18 .26 .31 .21 .27 .33 .45 .31 .34 .57 .66 .54	4.
L10.0 L15.0 5.0 Greenish Gray, hard Gnessic Granite 113.0. Fresh appearance. Mica L15.0 L20.0 5.0 Black to gray Gnessic Granite	•	.28 .19	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,436 E 51,137 N
Type of Drill: WD DD RD X CD	Inclination;	
Hole No.: EP #27	Collar Elev:	197.0
Date Drilled: 3/21/66 - Started 9:30 AM 3/22/66 - Completed 9:30 AM	Logged By:	H.W. Horst

					4.00	A 7.P	
77.01		FT.			ASS	AY	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
	}				1	1	
0.0	13.0	13.0	Recent Aluvium. Set Casing to 13.0'	•		0.07	
13.0	15.0	2.0	Recent Aluvium			i	
15.0	20.0	5.0	Recent Aluvium	•.		.11	
20.0	25.0	5.0	Recent Aluvium			.04	
25.0	30.0	5.0	Recent Aluvium			.07	
30.0	35.0	5.0	Recent Aluvium			.07	
35.0	40.0	5.0	Recent Aluvium. Hole caving badly at 38.0' mudding. No				
			circulation. Poor sample			.07	
40.0	45.0	5.0	Hole caving. Recent aluvium. Mudding. Poor circula-				
			tion and sample			.04	
. 45.0	50.0	5.0	Hole caving. Recent Aluvium. Mudding. Poor circula-				
			tion and sample			.04	
50.0	55.0	5.0	Hole caving. Recent Aluvium. Mudding. Poor Circula-				•,
			tion and sample			.04	
55.0	60.0	5.0	Hole caving. Recent Aluvium. Mudding. Poor circula-			1	
			tion and sample				
60.0	80.0	20.0	Recent Aluvium. Poor circulation. No sample return. No				
			samples taken this interval. No pressure on pull down				
80.0	100.0	20.0					
			sample taken this interval. No pressure on pull down				
100.0	p.05.0	5.0	Contact and return of cuttings at 100.0. Tan, iron		9	.22	
			Stained Gila Cg. Tr. Cu. Iron stained				
105.0	9	5.0	Tan to gray Gila Cg. Tr. Cu. Iron stained			.20	
110.0		5.0	Tan to gray Gila Cg. Tr. Cu. Iron stained			.22	
115.0		5.0	Tan, gray to black Gila Cg. Tr. Cu. Iron stained			.22	
120.0		5.0	Tan, gray, Gila Cg. Iron stained. Very fine returns, Tr.C	1		.42	÷
125.0	130.0	5.0	Tan, gray, Black with white qts. Iron stained. Tr. Cu		·		
			Harder. Lost circulation at 126.0		[•37	1
130.0	135.0	5.0	Black Gila Cg. Soft. Fair Cu. Iron stained. Poor circu-				
			lation			•31	
135.0	140.0	5.0	Black. More brown appearing, stronger Iron stained Gila				
			Cg. Very soft. Poor circulation. Fair Cu. Quartzite			[
•			to granite appearance in larger pebbles in return.			.21	
140.0	<u>h</u> 45.0	5.0	Brown to tan Gila Cg. Iron stained. Gila Cg. Poor Cu			.12	
145.0	150.0	5.0	Brown, tan Gila Cg. Iron stained, Poor Circ. Tr. Cu			.14	
150.0	155.0	5.0	Brown, Iron stained Gila Cg. Tr. Cu. Circulation better		· .	0.13	
155.0	160.0	5.0	Brown, Iron stained Gila Cg. Tr. Cu. Circulation better			0.14	
			Hole caved when adding next rod. Hole abandoned.		s:		
					· ·		
t _{vent} i seret		8		and and the second second	l :	ŀ į	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property:	Emerald Isle	Coordinates:	50,975 N 50,277 E
Type of Dril	11: WD DD RD \underline{X} CD	Inclination:	
Hole No.:	$\mathbb{EP} \# 28$ (Sheet 1 of 2)	Collar Elev:	190.0
Date Drilled	d: 3/22/66 Started 10:15 AM Completed 3:30 PM	Logged By:	H.W. Horst

	1	FT.			ASS	AY
FROM	ТО	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			
0.0	13.0 15.0	2.0	Set Casing. Recent Aluvium. Sampled Recent Aluvium			.14
15.0	20.0		11 11			.04
20.0	25.0					.07
25.0	30.0			[.07
30.0	35.0	5.0	17 11			.07
35.0	40.0	5.0				.07
40.0	45.0					tr.
45.0	50.0					tr.
50.0	55.0					tr.
. 55.0	60.0					. tr.
60.0	65.0					tr.
65.0	70.0					tr.
70.0	75.0	5.0				tr.
75.0 80.0	80.0					tr.
85.0	90.0			•		tr.
90.0	95.0					tr.
90.0	100.0					tr. tr.
100.0	105.0					.20
105.0	110.0					.31
110.0	115.0					.31
115.0	120.0					.25
120.0	125.0		Tan, Black Gila Cg. Fair Cu. Contact 121.0'	•		.44
		1	Poor return and circulation			•••
125.0	130.0	5.0	Same as above. Fair Cu		1	•53
	135.0		Tan, Gray to black Gila Cg. Trace Cu. Better circulation			.31
135.0	140.0		Same as above. Tr. Cu. Fair circulation			•35
140.0	145.0		Tan, Black to gray Gila Cg.FAIR Cu. Good return. Soft			0.49
145.0	150.0		Tan, Black to gray Gila Cg. Tr. Cu			0.24
150.0	155.0	5.0	Contact 151.0 - Brown, Iron stained, Highly altered granitic material			.18
155.0	160.0	5.0	Same as above	:		.20
160.0	165.0	5 0	Kaolonite. Brown, iron stained granitic material			.20
165.0	170.0		Same as above			.19
170.0	175.0		Same as above			.11
175.0	180.0		Soft, altered granițic material. Brown			.13
180.0	185.0		" " Kaolonite			
	1					
$\tilde{U} \approx \tilde{\gamma}^{(1)} V (\tilde{\gamma}^{(2)} \gamma^{(2)}) \text{where}$	د يو و ديد يعمر ينسو ا ر ر		renew a series and the series of		l 	L

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle

Coordinates:

Туре	of	Dr	111	: WI)	DD		RD	<u> </u>	CD		Incline	ation:	
Hole	No	• :	EP	#28	(Shee	t 2	of 2)		•		Collar	Elev:	190.0
								•						

Date Drilled: 3/22/66

Logged By: H.W. Horst

FROM	ТО	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY		
190.0 195.0 200.0 205.0 210.0	190.0 195.0 200.0 205.0 210.0 215.0 220.0	5.0 5.0 5.0 5.0 5.0 5.0	Soft, altered Granitic material. Brown. Kaolonite Same as above Same as above Soft, Brown, highly altered granite. Kaolonite Soft, Brown, highly altered granite. Kaolonite Soft, Brown, highly altered granite. Kaolonite Soft, Brown, highly altered granite. Kaolonite			.13 .11 .11 .11 .13 .07 tr.
•		÷		1. • 2		
	.7					

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

	Proper	ty:	Emerald Isle Coordinates: 50,834 N			
	Туре с	of Dril	l: WD DD RD X CD Inclination: 50,156 E			
	Hole N	10.: I	EP #29 (Sheet 1 of 2) Collar Elev: 189.0			
	Date I	rilled	L: 3/22/66 Started 4:00 p.m. Logged By: HWH 3/23/66 Completed 12:30 a.m.			
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASS	АУ	
0.0	13.0	13.0	Set casing. Sampled. Recent Aluvium		tr.	
13.0	15.0	2.0	Recent Aluyium		1 1	
15.0	20.0	5.0	Recent Aluvium		tr.	
20.0	25.0	5.0	Recent Aluvium		tr.	
25.0	30.0	5.0	Recent Aluvium		tr.	
30.0	35.0	5.0	Recent Aluyium		tr.	
35.0	40.0	5.0	Recent Aluyium		tr.	
40.0	45.0	5.0	Recent Aluyium	· ·	tr.	
45.0	50.0	5.0	Recent Aluvium		tr.	
50.0	55.0	5.0	Recent Aluvium		tr.	
55.0	60.0	5.0	Recent Aluyium		tr. tr.	
60 .0	65.0	5.0	Recent Aluvium	10 m	1 1	
65.0	70.0	5.0	Recent Aluvium		tr.	
70.0	75.0	5.0	Recent Aluvium		tr.	
75.0	80.0	5.0	Recent Aluvium		tr. tr.	
80.0	85.0	5.0	Recent Aluvium		tr.	
85.0	90.0	5.0	Recent Aluvium		tr.	
90.0	95.0	5.0	Recent Aluyium		tr.	
95.0	100.0	5.0	Recent Aluyium		.08	
100.0	105.0	5.0	Recent Aluyium		.08	
105.0	110.0		Recent Aluyium		.09	
110.0	115.0	5.0	Recent Aluyium		.12	
115.0	120.0		Recent Aluvium		. 25	
120.0	125.0		Recent Aluvium			
125.0	130.0		Contact 126.0'. Tan to Gray Gila Cg. Hard. Fair Cu		.15	
130.0	135.0		Tan, Gray to Black Gila Cg. Iron Stained. Fair Cu. Hard		.55	
135.0	140.0	-	Tan to Brown, Much Black Gila Cg. Hard. Heavily iron			
			stained. Fair Cu.		.59	,
140.0	145.0	5.0	Black to Gray Gila Cg. Hard. Good Cu.	• .	1 1	
145.0	150.0	, ,	Black to Gray Gila Cg. Hard. Good Cu.		.73	
					1.12	
150.0	155.0	5.0	Tan, Black to Gray Gila Cg. Hard. Good Cu.	.	1.19	
	1				1 [

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	Property: En	merald Isle		Coordinates:
•	Type of Drill:	WD DD _x	RD CD	Inclination;
	Hole No.: EP #29	(Sheet 2 of 2)		Collar Elev:
	Date Drilled;	3/23/66	•	Logged By: HWH

	1	FT.		1	ASSA	AY .	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
155.0	160.0	5.0	Tan, Black to Gray Gila Cg. Hard. Good Cu.			1.52	
160.0			Brown to Black Gila Cg. Hard. Good Cu.			1.50	
165.0	170.0	5.0	Brown to Black Gila Cg. Hard. Good Cu.			.90	
170.0	175.0	4 0	Brown to Black Gila Cg. Very Hd. Fair Cu.			.60	
175.0	180.0	5.0	Brown to Black Gila Cg. Hard. Good Cu.			1.15	
180.0	185.0	5.0	Brown to Black Gila Cg. Highly Silicified. Very Hd. Tr. Cu.			.46	
185.0	190.0	5.0	Black, Brown Gila Cg. Highly Silicified. Very Hd. Fair Cu.			.57	
190.0	195.0	5.0	Black, Brown Gila Cg. Hard. Fair Cu.		· ·	.58	
195.0	200.0	5.0	Black, Brown Gila Cg. Hard. Tr. Cu.			.48	
200.0	205.0	5.0	Altered, weathered granitic material at 200 contact. Soft.	1			
			Poor circulation and return			.22	
205.0	210.0		Brown, altered granitic material. Poor circulation and return			.20	
210.0	215.0	6 B	Brown, altered granite. Poor circ. and return			.10	
215.0	220.0	5.0	Brown, altered, granite. Kaolonite. Good circulation & retur	þ		.11	
		- -	Samples 200-215 - Moist and Damp when hole bottomed. Water in holtsk hole.				
					•		

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE	LOG	
Property: Emerald Isle	Coordinates:	50,631 N 50,165 E
Type of Drill: WD DD x RD CD	Inclination;	
Hole No.: EP #30 (Sheet 1 of 2)	Collar Elev:	186.0
Date Drilled: 3/23/66 Started 2:30 pm 3/24/66 Completed 9:30 am	Logged By:	HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	AS	SSAY	
0.0	13.0	13.0	Set casing. Recent Aluvium		.07	
13.0	15.0	2.0	Recent Aluvium		.15	
15.0	20.0	5.0			.15	
20.0	25.0	5.0	Recent Aluvium		.34	
25.0	30.0	5.0	Recent Aluvium		.24	
30.0	35.0	5.0	Recent Aluvium		.24	
35.0	40.0	5.0	Recent Aluvium		.20	· ·
40.0	45.0	5.0	Recent Aluyium		.24	
45.0	50.0	5.0	Recent Aluvium		.22	
50.0	55.0	5.0	Recent Aluvium		.18	·
55.0	60.0	5.0	Recent Aluvium		1	a.
60.0	65.0	5.0	Recent Aluyium		.13	
65.0	70.0	5.0	Recent Aluyium		.11	
70.0	75.0	5.0	Recent Aluvium		.14	
75.0	80.0	5.0	Recent Aluvium		. 18	
80.0	85.0	5.0	Recent Aluyium			
85.0	90.0	5.0	Recent Aluvium		. 22	
90.0	95.0	5.0	Recent Aluvium		.30	
95.0	100.0	5.0	Recent Aluvium to 97.0 Contact Hd. Gila at 97.0		.31	
100.0	105.0	5.0	Gray to Black, Iron Stained Gila Cg. Hard. Tr. Cu.		.40	
105.0	110.0	5.0	Gray to Black Iron Stained Gila Cg. Hard. Tr. Cu.	•	.42	
110.0	115.0	5.0	Same as above. Tr. Cu.		. 39	
115.0	120.0	5.0	Gray Gila Cg. Highly Silicified. Tr. Cu.		. 39	
120.0	125.0	5.0	Tan, Gray to Black Gila Cg. Highly Silicified. Very Hd. Good Cu. Show		1.31	
125.0	130.0	5.0	Tan, Gray to Black Gila Cg. Highly Silicified. Very Hd. Good Cu		1.21	
130.0	135.0	5.0	Tan, Gray to Black Gila Cg. Highly Silicified. Very Hd. Good Cu		1.69	
135.0	140.0	5.0	Tan, Gray to Black Gila Cg. Highly Silicified. Very Hd. Good Cu		1.53	
140.0	145.0	5.0	Gray to Black, Iron Stained Gila Cg. Highly Silicified. Very Hd Good Cu		1.45	
145.0	150.0	5.0	Gray, Tan, Black Gila Cg. Very Hd. Highly Silicified. Good Cu		1.31	
L50.0	155.0	5.0	Same as above. Good Cu		1.12	
155.0	160.0	5.0	Gray, TanBlack Gila Cg. Very Hard. Highly Silicified. Fair Cu		.59	
Section and stress						1

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

HWH

Property: Emerald Isle		Coordinates:
Type of Drill: WD DD	RD <u>x</u> CD	Inclination:
Hole No.: EP #30 (Sheet 2 of 2)		Collar Elev:
Date Drilled:		Logged By:

******	1	FT.			ASS	AY	
TROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
160.0	165.0	5.0					
	1	1 1				.66	
	170.0					.57	
	175.0		Brown to Tan Gila Cg. Soft. Fair Cu			.58	
175.0						.50	
180.0	185.0					.42	
185.0	1	X 5	Brown to Black Gila Cg. Fair Cu.			.50	
	195.0	5.0	Brown to Black Gila Cg. Good Cu.			.77	
195.0	200.0	5.0	Brown to Black Gila Cg. Tr. Cu			.35	
200.0	205.0	5.0					
			Hit Water			.35	
205.0	210.0	5.0	Brown, Black Gila Cg. Sample Damp. Fair Cu. Dry Sample			.33	
	1		Circulation Returned			. 21	
210.0	215.0	5.0				40	
215.0	220.0	5.0	Much, altered, granitic material in appearance. Tr. Cu.			.49	
			Sample Badly Masked. Kaolonite Softer. Proable			.36	,
			contact of altered bedrock $217.0'$		4	.30	
220.0	225.0	5.0	Circulation poor. Air Holding Water Back in Hole. Hard to				
			Get Cuttings to Return. Trying to Dry Hole. No				
			Return at 221.0				
225.0	230.0	5.0	No Return			.18	
230.0	235.0	5.0	Fine, brown altered granite. Hard. All particles in cuttings			.10	
	-		even sized due to hardness. Return coming back.				
			Hole drying.				
235.0	240.7	5'7''			-		
200.0	210.7	57	Return coming back, fine, even grained altered granite. Hole drying but return less in volume than usual.				
			Composite sample made from 220.0 - 240'7"				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

-	Property: Emerald Isle	Coordinates:	50,938 N
	Type of Drill: WD DD RD X OD	Inclination;	J∪,439 E
	Hole No.: EP #31	Collar Elev:	202.0
	Date Drilled: 3/24/66 - Started 1:00PM	Logged By:	H.W. Horst

3/24/66 - Started 1:00PM 3/24/66 - Completed 4:30 PM

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	АҮ	
100.0 105.0 110.0 115.0	15.0 20.0 25.0 30.0 35.0 40.0 45.0 55.0 60.0 55.0 60.0 70.0 75.0 80.0 90.0 95.0 100.0 105.0 100.0	25555555555555555555555555555555555555	Set Casing Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium Recent Aluvium (?) Contact of Tan Gila Cg. at 61.0. Fair Cu ? Tan Gila Cg. Good Cu Hard? Tan Gila Cg. Good Cu Hard? Light gray Gila Cg. Hard. Contact at 80.0 Good Cu Light gray to tan Gila Cg. Highly Silicified. Hard. Good C Hray, tan with some Black Gila Cg. Highly Silicified. Hd. Good Cu Tan, Black Gila Cg. All Black at 99.0. Softer. V. good Cu Black to Brown Gila Cg. Hard. Good Cu Black to Brown Gila Cg. Hard. Good Cu Black to Brown Gila Cg. Hard. Good Cu Started run. Lost circulation at 121. Lowered rods to 135.0. Had to drill in, but no returns or circulation. Rods in a bind, hole going crocked at 133.0. Had to pull out to avoid sticking rods. Hole bottomed at 135.0' - Mud on bit when rods were pulled.	1		.20 .22 .76 .58 .96 .61 .47 .49 1.21 .61 .77 1.25 1.31 1.41 1.68 1.73 1.49 3.06 2.39 1.53 1.08 .92	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,797 N 50,059 E
Type of Drill: WD DD RD CD	Inclination:	
Hole No.: EP #32 (Sheet 1 of 2)	Collar Elev:	186.0
Date Drilled: 3/25/66 Started: 7:30 AM	Logged By:	H.W. Horst

Completed 11:30 AM

		1 73/77		
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
			DECONTRIION OF MAIEATAL AND REMARKS	
0.0	13.0	13.0	Set Casing. Recent Aluvium	.04
13.0	15.0	1	Recent Aluvium	.10
15.0	20.0			.04
20.0	20.0		11 II	.04
25.0	30.0		W II	.08
30.0	35.0		11 11	.10
35.0	40.0		21 TT	.05
40.0	45.0		ff 17	.05
40.0	47.0 50.0		77 TT	.04
45.0 50.0	55.0		FT TT	.05
· 55.0	60.0		rf 17	.05
60.0	65.0	-	" " Mudded Hole	.11
65.0	70.0		11 II	.08
70.0	75.0		11 Tf	.08
75.0	80.0		11 11	.07
80.0	85.0		" " Mudded Hole	.07
85.0	90.0			.08
90.0	95.0			.08
	100.0	5.0	11 11	.08
100.0	105.0	5.0	" " Mudded Hole	.08
105.0	110.0	5.0	Recent Aluvium. Very fine. Poor circulation	.13
110.0	115.0	5.0	17 11 17 17 17 17	.11
115.0	120.0	5.0	Recent Aluvium. Very fine material. Poor circulation Mudded	.11
120.0	125.0	5.0	Recent Aluvium. Mudded. Good circulation	.13
	130.0	- 1	Recent Aluvium. Somewhat harder	.15
130.0	135.0	-	Contact of Gila Cg. Hard. Silicified at 131.0'	.38
<u> </u>			Gray, brown, with Black Gila Cg. Tr. Cu Show	
135.0	140.0	5.0	Gray, Brown to black Gila Cg. V. hd. Highly silicified	
			Fair Cu. Very black at 139.0'	.54
140.0	145.0	5.0	Black, brown Gila Cg. Hard. Some narrow soft streaks. Tr Cu	.44
	150.0	-	Gray, Black Gila Cg. Some Iron staining. Very hd. Tr. Cu	.28
150.0	155.0	5.0	Gray, Black Gila Cg. Very hd. Tr. Cu	.44
155.0	160.0		Gray to black Gila Cg. Very hd. Good Cu show.	1.03
160.0	165.0		Brown to tan, with some Black Gila Cg. Hard. Good Cu	1.38
165.0	170.0		Brown, Tan with some Black Gila Cg. Hard. Good Cu	1.04
170.0			Brown, Black Gila Cg. Hard Good Cu	.90
175.0	175.0 180.0	5.0	Tan, Gray, Black Gila Cg. Hard to 178.0. Soft after. Fair	
			Cu	.47
				•+(
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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property: Emerald Isle

Coordinates:

 Type of Drill: WD ____ DD ___ RD _X CD ____ Inclination:

 Hole No.: EP #32 (Sheet 2 of 2)

 Collar Elev:

Date Drilled: 3/25/66

Logged By: H.W. Horst

ROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
90.0 95.0 95.0 00.0	190.0 195.0 200.0 205.0 210.0	5.0 5.0 5.0 5.0 5.0	Brown, Black Gila Cg. Soft. Tr. Cu. Kaolonite Brown Gila Cg. Tr. Cu Brown Gila Cg., with some Black. Fair Cu. Kaolonite Brown, Iron stained altered Granite in at 196.0' contact. Brown, Iron stained, altered Granite. Sample damp Brown, Heavily Iron stained, altered Granite. Kaolonite. Sample damp	.48 .55 .65 .50 .32 .35
10.0	215.0	5.0	Brown, altered Granite, Heavily Iron stained. Kaolonite.	
15.0	220.0	5.0	Sample damp Brown, altered Granite. Heavily Iron stained. Kaolonite.	•37
15.0	220.0	5.0	Brown, altered Granite. Heavily Iron stained. Kaolonite. Sample damp	.25

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property:Emerald IsleCoordinates:50,684 N
50,052 EType of Drill:WD _____ DD ____ RD X_CD _____ Inclination:Inclination:Hole No.:EP #33 (Sheet 1 of 2)Collar Elev: 182.0Date Drilled:3/25/66 Started 1:00 PM
Completed 6:30 PMLogged By: H.W. Horst

				فيدينا ومحمد الشمر والم			
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
~~~~~	<u> </u>	<u> </u>			1	1	1
0.0	13.0	13.0	Recent Aluvium. Sampled. Set casing			.07	
13.0	1 15.0	2.0				.05	
	12	5.0	57 69			.05	
	1 25.0	5.0	17 17			.05	
25.0	30.0		17 17 .			.05	
30.0	35.0	1 .	17 17			.05	
35.0	40.0		11 12			:26	
40.0	45.0		11 17			.26	
45.0	50.0		11 . 11			•34	
.50.0	55.0					•35	
55.0	60.0	5.0	11 11 11 71			•36	
60.0	65.0	5.0	17 77 11 17			.32	
65.0	70.0	5.0	17 99	•		.27	
70.0	.75.0	5.0	17 11 17 11			•26	
75.0	80.0	5.0	n n			•30	
80.0 85.0	85.0	5.0				• 32	
90.0	90.0 95.0	5.0				•:38	
90.0	95.0	5.0	" " to 93.0. Tan, consolidated Gila contact at 93.0 (?) Tr. Cu. (Recent Aluvium(?)			.43	
95.0	100.0	5.0	Brown to Tan, with some Black, Gila Cg. Hard. Tr. Cu			175	
			(Recent Aluvium?)			•39	
100.0	105.0	5.0	Brown with some Black Gila Cg. Softer. Tr. Cu (Recent Aluv?	· \		.24	
05.0	110.0		Same as above. Tr. Cu (Recent Aluvium?)	,	-	.16	
10.0	115.0		Brown to Tan Gila Cg. Soft. Tr. Cu (Recent Aluvium?)			.19	
15.0	120.0	5.0	Brown Gila Cg. Soft. Tr. Cu (Recent Aluvium?)			.18	
20.0	125.0	5.0				.18	
25.0	130.0	5.0	Brown with some Black Gila Cg. Soft. Tr. Cu (Recent Aluvium	2)		.15	
130.0	135.0	5.0	Brown Gila Cg. Soft. Tr. Cu (Recent Aluvium?)	.,		.24	
		5.0	Brown with some Black Gila Cg.TR. Cu (Recent Aluvium?)			.28	
	145.0	5.0	Brown to Tan Gila Cg. Tr. Cu (Recent Aluv.?)			•33	
45.0	150.0	5.0	Brown with some Black & Green Gila Cg. Very hard at 149.0				
•			Tr. Cu (Contact?)			•34	
	155.0		Brown Gila Cg. Very hard. Fair Cu			.66	
	160.0		Brown to Tan, some Black Gila Cg. Very hard. Good Cu			•99	
	165.0	5.0	Brown with Black Gila Cg. Fair Cu in at 163.0. Very gd. Cu			2.04	
	170.0		Tan to Brown with Black Gila Cg. Very hard. Good Cu			1.93	•
.70.0	175.0	5.0	Fan to Brown with some Black Gial Cg. Hard. Good Cu			1.16	
1	1 1					1	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. 0. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle Coordinates: Type of Drill: WD ___ DD ___ RD X CD ____ Inclination: Hole No.: EP #33 (Sheet 2 of 2) Collar Elev:

182.0

Date Drilled: 3/25/66

Logged By: H.W. Horst

				•			
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	1	ASSA	ĄΥ	
180.0 185.0 190.0 200.0 205.0 210.0 125.0 220.0 225.0 225.0 235.0	185.0 190.0 200.0 205.0 210.0 215.0 220.0 225.0 230.0 235.0 240.0 245.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	<ul> <li>Tan, Brown Gila Cg. Good Cu</li> <li>Tan to Brown Gila Cg. Good Cu</li> <li>Tan to Brown Gila Cg. Hard. Good Cu</li> <li>Brown Gila Cg. Hard Good Cu</li> <li>Tan to Brown Gila Cg. Hard. Fair Cu</li> <li>Tan to Brown Gila Cg. Tr. Cu</li> <li>Tan to Brown Gila Cg. Tr. Cu</li> <li>Brown to Black Gila Cg. Fair Cu</li> <li>Brown to Black Gila Cg. Hard. Tr. Cu</li> <li>Brown, Black Gila Cg. Hard. Wet sample. Water in hole at 220.0.Good Cu. Blue Cu</li> <li>Black to Brown Gila Cg. Wet sample. Good Cu. Blue</li> <li>Black to Brown Gila Cg. Wet sample. Altered Brown Granitic material in at 239.0 Contact</li> <li>Altered Brown, soft Granite. Wet sample.</li> </ul>			1.51 .92 .89 .77 .71 .42 .43 .44 .44 .77 .70 .82 .50 .33 .26	
					1 1		

33-21 (6-65)

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	50,923 N Coordinates: 50,057 E
Type of Drill: WD DD RD x CD	Inclination:
Hole No.: EP #34 (Sheet 1 of 2)	Collar Elev: 187.0
Date Drilled: 3/26/66 Started 9:30 am	Logged By: HWH

Completed 3:00 pm

FROM	TO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	SAY	
					1		1
0.0	20.0	20.0	Recent Aluvium. Set Casing to 13.0'			.05	
20.0	40.0	20.0				.08	
40.0	60.0	20.0	Recent Aluvium			.05	
60.0	80.0	20.0	Recent Aluvium			.04	
80.0	100.0	20.0	Recent Aluvium			.07	
100.0	105.0	5.0	Recent Aluvium. Sampled			.08	
105.0	110.0	5.0				.07	
110.0	115.0	5.0	Recent Aluvium. Sampled		,	.10	
115.0	120.0	5.0				.09	
·120.0	125.0	5.0				.16	
125.0	130.0	5.0				.17	
130.0	135.0	3				.13	
135.0	140.0	5.0				1.10	1
-			Used water to free tools and clean hole				
140.0	145.0	5.0	Tan to Black Gila Cg. Tr. Cu. Hard. Contact 140.0	l		. 29	
145.0	150.0	5.0	Black to Brown. Iron Stained Gila Cg. Fair Cu. Hard			.61	
150.0	155.0	5.0	Black to Brown Gila Cg. Kron Stained. Fair Cu. Hard			.61	
155.0	150.0	5.0	Black, Gray with Iron Staining. Gila Cg. Fair Cu. Hard			.67	}
160.0	165.0	5.0	Brown, with some Black, Gila Cg. Fair Cu. Hard			.61	1
165.0	170.0	5.0				.70	
170.0	175.0	5.0	Tan to Gray Gila Cg. Hard. Fair Cu			.65	
	180.0	5.0				.64	
180.0	185.0		Brown to Black Gila Cg. Soft. Fair Cu		1	. 55	
185.0	190.0	5.0	Altered, soft granitic appearing material in at 185. Brown		·	.33	
			Soft. Tr. Cu. Contact at 185.0		}		
190.0	195.0	5.0	Brown, Altered, granitic material. Kaolonite. Tr. Cu. Soft			. 28	
195.0	200.0	5.0	Brown, Altered, granitic appearing material. Kaolonite.				
			Soft. Fair Cu.		1	. 24	
200.0	205.0	5.0	Brown to Tan, altered Granitic material. More Qts present				
			and Harder. Tr. Cu.			.19	
205.0	210.0	5.0	Brown, Altered Granitic Material. Cu. visible		ł	.16	
210.0	215.0	5.0	Brown, Altered Granitic. No Cu visible			.14	
				·			
	1			1	1		[

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property:	Emerald Isle	Coordinates:
Type of Drill:	WD DD RD CD	Inclination;
Hole No.: EH	? #34 (Sheet 2 of 2)	Collar Elev:
Date Drilled:	3/26/66 Started 9:30 am	Logged By: HWH

FROM	то	TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		Assay			
215.0					4	.18	
220.0	225.0	5.0	Brown Heavily Iron Stained Altered Granite. Kaolonite No Cu visible			.11	
225.0	230.0	5.0	Brown, Heavily Iron Stained Altered Granite. Kaolonite No Cu visible			.11	
230.0	235.0	5.0	Brown, to Red Hematite Stained, Altered Granite. Kaolonite Sample red in appearance. Reduced circulation at 230.0			. 39	
235.0	240.0	5.0	Poor Sample. Barely circulation and cuttings Return. Altered Granite	L		.18	
÷							2 °

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,513 N 50,509 E
Type of Drill: WD DD RD CD	Inclination:	
Hole No.: EP #35	Collar Elev:	189.0
Date Drilled: 3/27/66 Started 8:00 AM	Logged By:	H.W. Horst

Completed 10:45 AM

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY
0.0	20.0	20.0	Recent Aluvium. Set casing to 13.0. Sampled	.13
20.0	25.0	5.0	" " Sampled	•33
25.0	30.0	5.0	11 11 TT • •	
30.0	35.0		17 17 17	• 33 • 34
35.0	40.0	5.0	87 99 FI	.33
40.0	45.0	5.0	Recent Aluvium "	.41
45.0	50.0	-	11 11 II	.36
50.0	55.0		Contact of Brown to Black Gila Cg. at 50.0. Soft. Tr. Cu	.34
55.0	60.0		Brown, Black Gila Cg. Tr. Cu. Somewhat harder	.37
60.0	65.0		Brown, Gray to Black Gila Cg. Tr. Cu	.54
65.0	70.0		Brown Gila to 68.0'. Contact altered Granite at 68.0'	•35
70.0	75.0	5.0	Altered Green Gnessic Granite	.46
75.0	80.0	-	Green, Blue Gnessic Granite	.26

# EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,895 E
Type of Drill: WD DD RD X CD		
Hole No.: EP #36	Collar Elev:	206.0
Date Drilled: 3/27/66 Started 11:45 AM	Logged By	TT U Treach

Completed 1:45 PM

H.

W.•	Horst	

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASSAY		
0.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0 55.0 60.0	25.0 30.0 35.0 40.0 45.0 50.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Recent Aluvium, Set casing to 3.0 Sampled """Sampled """"Black, Aluvium at 38.0' Contact Black Gila Cg. at 38.0. Fair Cu Black to Brown Gila Cg. Tr. Cu. Very soft Black to Brown Gila Cg. Tr. Cu. Very soft Black, Brown Gila Cg. Tr. Cu. Very soft Black, Brown Gila Cg. Hard. Good Cu Black, Brown, Gray Gila Cg. Hard. Good Cu			.25 .45 .39 .46 .54 .47 .41 .53 1.37	
65.0 70.0 75.0	70.0 75.0 80.0	5.0 5.0	Black, Brown, Gila Cg. Softer. Good Cu Green Gnessic Granite in at 70.0. Altered Gnessic Granite 72.0 - 75.0 Altered Gnessic Granite. Fresher appearing to 78.0. Blue Green Gnessic Granite 78.0 - 80.0			.78 .92 .38 .11	

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,877 N 51,107 E
Type of Drill: WD DD RD _X CD	Inclination:	
Hole No.: EP #37	Collar Elev:	210.0
Date Drilled: 3/27/66 Started 2:00 PM Completed 3:15 PM	Logged By:	H.W. Horst

1 1 1 -		FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASSAY			
0.0 10.0 20.0 25.0 30.0 35.0 40.0 45.0	20.0 25.0 30.0	10.0 5.0 5.0 5.0 5.0	Recent Aluvium. Set 3' casing. Sampled Gila Cg. contact at 11.0' Black. Hard, consolidated. Tr. Cu Brown, Iron Stained Gila Cg. Some Black. Hard. Tr. Cu Brown, Gray to Black Gila Cg. Hard. Fair Cu Brown, Gray to Black Gila Cg. Hard. Good Cu Brown, Iron stained Gila Cg. Hard Fair Cu. Brown, strongly iron stained Granite at 39.0' Altered, Granite. Brown. Iron stained. Soft. Kaolonite Granite, Brown, Iron stained. Fresher appearance			.04 .27 .57 .68 1.06 .54 .22 .20		
50.0 55.0	55.0 60.0	5.0	Altered Brown Granite. Hard. Very dusty Altered Brown Granite. Hard. Very dusty			.13 .10		
l.				1				

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

50,941 N Emerald Isle 51,140 E Property: Coordinates: Type of Drill: WD ___ DD ___ RD __ CD ___ Inclination: Hole No.: EP #38 Collar Elev: 208.0 Date Drilled: 3/27/66 Started 4:00 pm Logged By: HWH 5:45 pm

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASS	AY	
0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0	5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Recent Aluvium. Sampled Recent Aluvium. Sampled Recent Aluv. to 18.0 - Black Gila Cg. at 18.0. Tr. Cu. Tan, Black Gila Cg. Soft. Fair Cu Black, Brown Gila Cg. Soft. Tr. Cu. Gila Cg. to 32.0. Brown, Altered Granite in at 32.0 Brown, Highly Altered, Iron Stained Granite. Kaolonite Brown, Highly Altered, Iron Stained Granite. Samples Damp		.05 .05 .04 .17 .39 .24 .09 .07 .09 .08	
· ·						

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	Proper Type ( Hole I	of Dril	DRILL HOLE Emerald Isle 1: WD DD RD <u>x</u> CD EP #39	LOG Coordinates: Bottom of Pit Inclination: Collar Elev:	51,052 N 50,682 E 185.0	
	Date I	Drilled	: 3/28/66 Started 10:30 am Completed 11:15 am	Logged By:	Н₩Н	
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMA	ARKS		ASSAY
0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0	5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.0-1.0 Gila Cg. Altered, Brown Granite Altered, Brown, Heavily Iron Stained Gra Altered, Brown, Heavily Iron Stained Gra Altered, Brown, Heavily Iron Stained Gra Brown, Heavily Iron Stained, Altered Gra Same as above. No Cu. visible Brown, Heavily Iron Stained, Altered Gra Brown, Heavily Iron Stained, Altered Gra	anite. Cu show (s anite. Cu show (s anite anite. Good Samp anite. No Cu	alted sample) salted sample	.79 .08 .09 .07 tr tr tr tr .04

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL	HOLE	LOG

		<u>+</u>	KILL HULE	LUG	51,063 N
Property:	Emerald Is	e		Coordinates:	50, 798 E Bottom of Pit
Type of Drill;	WD D	D RD	CD	Inclination:	
Hole No.:	EP #4	0		Collar Elev:	195.0
Date Drilled:	3/28/66	Started 11:25		Logged By:	HWH

Completed 11:45

ROM	ŤO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	Assay
0.0 5.0 10.0 15.0	5.0 10.0 15.0 20.0	5.0 5.0 5.0 5.0	Brown, Altered Gila Cg. Good Cu Brown, Black Gila Cg. Good Cu Brown, Black, Gila Cg. Tr. Cu. Gila Cg to 16.0. Brown, Iron Stained, Altered Granite with Kaolonite 16'. No Cu. visible	1.08 .99 .48 .12

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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

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#### DRILL HOLE LOG

			DRILL HOLE	LOG	51,057 N	1
i.	Prope:	rty:	Emerald Isle	Coordinates:		Bottom of Pit
	Туре	of Dril	L1: WD DD RD CD	Inclination:		
	Hole 1	No.:	EP #41	Collar Elev:	193.0	
	Date ]	Drilled	1: 3/28/66 Started 11:50 am Completed 12:05 pm	Logged By:	HWH	
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REN	MARKS		ASSAY
0.0 5.0 10.0 15.0	5.0 10.0 15.0 20.0	5.0 5.0 5.0 5.0	Black to Brown Gila Cg. Fair Cu. Black Gila Cg. Tr. Cu.	Granite		.90 .55 .48 .16

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

- Empirical J Tul	-		51,026 N		
Property: Emerald Isle	3	Coordinates:	50,977 E Bottom of Pit		
Type of Drill: WD	DD RD X CD	Inclination:			
Hole No.: EP #42	14 14	Collar Elev:	198.0		
Date Drilled: 3/28/66	Started 12:10 pm	Logged By: HV	VH		

Started 12:10 pm Completed 12:50 pm

ROM TO		TO DRILL DESCRIPTION OF MATERIAL AND REMARKS			Assay			
0.0 5.0 10.0 15.0 20.0	5.0 10.0 15.0 20.0 25.0	5.0 5.0 5.0 5.0 5.0 5.0	Gray to Brown Gila Cg. Fair Cu Gray to Brown Gila Cg. Tr. Cu Gray to Brown Gila Cg. Iron Stained. Tr. Cu.		. 59 . 68 . 25 . 28			
25.0 30.0 35.0	30.0 35.0 40.0	5.0 5.0 5.0	Granite in at 22.0' Brown, Heavily Iron Stained Granite		.18 .14 .11 tr			

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

	Type o Hole N	of Dril No.:	Emerald Isle       Coordinate         L1: WD DD RD X CD Inclination       Inclination         EP #43       Collar Ele         A: 3/28/66 Started 1:30 PM       Logged By         Completed 3:00 PM       Logged By	on: .ev:	•	35 E .			
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	: : 	2		ASS	AΥ	
0.0 5.0 10.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0 55.0	15.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0 55.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Recent Aluvium. Sampled. Set casing to 3.0' Contact. Brown, altered Gila Cg. at 7.0'. Tr. Cu Tan, Gray to Black Gila Cg. Tr. Cu Tan, Gray to Black Gila Cg. Tr. Cu Red, Hemstatite showed Granitic material at 27.0 Brown, Reddish altered Granitic material - Kaolo Limen Brown, Reddish altered Granite, Kaolonite, Soft, Brown altered Granite. Soft. Kaolonite Tan to Gray altered Granite. Harder Gray, Green to Blue Enessic Granite. Fresh. Hard Green to Blue Gnessic Granite. Fresh. Hard	)'. Tr onite nite Lime				0.10 0.26 .38 .50 .57 1.01 .77 .11 .09 .08 .09	<b>)</b> <i>I</i>

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

CD

Property: Emerald Isle

• Coordinates: 50,

Inclination:

Logged By:

50,658 N 50,900 E

H.W. Horst

Type of Drill: WD ___ DD ___ RD ____

Hole No.: EP #44

Collar Elev: 204.0

Date Drilled: 3/28/66 Started 3:30 PM Completed 5:00 PM

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASS	AY
0.0 10.0 20.0 25.0 30.0	20.0 25.0 30.0 35.0	10.0 5.0 5.0 5.0	Recent Aluvium. Sampled		tr. 0.20 0.24 0.34 0.44
35.0 40.0 45.0 50.0 55.0	40.0 45.0 50.0 55.0 60.0	5.0 5.0 5.0	Recent " to 37.0'. Brown Gila Cg. Contact at 37.0' Tr. Cu Tan, to Gray Gila Cg. Tr. Cu. Rather soft Brown to Black Gila Cg. Tr. Cu. Soft Gila Cg. to 52.0. Greenish, altered, Gnessic Granite at 52 Green, to Brown, Gnessic Granite. Highly altered and iron	.0	0.41 0.44 0.57 0.61
60.0 65.0 70.0 75.0	65.0 70.0 75.0 80.0	5.0 5.0	stained. Brown, heavily Iron stained Granite. Soft Brown, Iron stained Granite. Harder. More Qts. Fresher Gray to Blue Gnessic Granite. Fresh. Hard Fresh, unaltered, Green to Blue Gnessic Granite		0.13 0.08 0.09 0.07 0.10

60.0

65.0

70.0

75.0

80.0

5.0

5.0

5.0

5.0

5.0

55.0

60.0

65.0

70.0

75.0

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

			DRILL HOLE LOG	•	51, 223 N	
	Prope	rty:	Emerald Isle Coord	inates:	50, 873 E	
	Туре о	of Dril	1: WD DD RD x CD Inclin	nation:		
	Hole 1	No.:	EP #45 Colla:	r Elev:	226.0	
	Date 1	Drilled	: 3/29/66 Started \$:15 am Logged Completed 9:45 am	d By: HW	н	
FROM	TO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS			ASSAY
0.0 5.0 10.0 15.0	5.0 10.0 15.0 20.0	5.0 5.0 5.0 5.0	Recent Aluvium. Sampled. Set Casing to 3.0' Recent Aluvium. Sampled Recent Aluvium. Sampled Recent Aluvium. Sampled			0.05 tr 0.13 0.43
20.0 25.0 30.0	25.0 30.0 35.0	5.0 5.0 5.0	Recent Aluvium. Sampled Recent Aluvium. Sampled Recent Aluvium. Sampled	•		tr tr tr tr
35.0 40.0 45.0 50.0	40.0 45.0 50.0 55.0	5.0 5.0 5.0 5.0	Recent Aluvium. Sampled Recent Aluvium. Sampled Recent Aluvium Soft, Highly Altered, Granite. First Consolidat	ed Materia	a	tr tr tr tr

tr

tr

tr

tr

tr

Damp and Clay seam at 50.0'

Altered, Brown to Green Granite. Soft

Harder, More Qts in Altered Granite

Fresher appearing Iron Stained Granite

Altered, Brown, Granite. Soft

Green to Brown, Highly Altered Granite Soft

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property; Emerald Isle	2	Coordinates:	51, 190 N 50, 943 E
Type of Drill: WD	DD RD X CD	Inclination:	· · · · ·
Hole No.: EP #46		Collar Elev:	220.0
Date Drilled; 3/29/66	Started 10:15 Completed 11:45	Logged By:	Н₩Н

		FT.		ASSAY		
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			
	· ·					
0.0	5.0	5.0	Recent Aluvium. Set Casing to 3' Sampled	tr		
5.0	10.0	5.0		tr		
10.0	15.0	5.0	Recent Aluvium.	tr		
15.0	20.0	5.0	Recent Aluvium. Granite Boulders	tr		
20.0	25.0	5.0	Boulders to 23.0. Soft Recent Aluvium 23.0-25	tr		
25.0	30.0	5.0	Recent Aluvium	tr		
30.0	35.0	5.0	Red to Brown Heavily Iron Stained Granite. Soft Hematite	tr		
35.0	40.0	5.0	Brown, Highly Altered Granite Soft	tr		
40.0 °	45.0	5.0	Brown Highly Altered Granite. Some Grey Gnessic Granite. Mixed	tr	•	
45.0	50.0	5.0	Brown, Iron Stained. Granite.	tr		
50.0	55.0	5.0	Brown, Iron Stained. Granite. Fresh appearance. More Qts. Harder	tr		
55.0	60.0	5.0	Brown, Iron Stained, Granite. Hard. Much Qts.	tr		

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

### DRILL HOLE LOG

	Prope: Type of Hole I	of Dril	Emerald Isle .1: WD DD RD CD EP #47	Coordinates: Inclination: Collar Elev:	51,0	38 N 06 E	ф. 		
		-	L: 3/29/66 Started 12:30 pm Completed 1:30 pm	Logged By:	214 HW				
ROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REM	ARKS			ASS	AY	
0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0	5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Recent Aluvium. Sampled. Set 3' Casin Recent Aluvium (?) Recent Aluvium (?) Recent Aluvium (?) Recent Aluvium. Altered Granitic Mate Soft Granitic Material. Somewhat harde Altered, Iron Stained, Granite. Hard. J Very Hrd. Brown, Iron Stained, with Gr Qts in Gray Granite	rial at 23.0. Soft r. Altered Mixed Gray Grani				0.61 0.68 0.87 0.27 tr tr tr tr tr	

Property:

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOGEmerald IsleCoordinates:

51, 221 N 50, 642 E

Type of Drill;	: WD I	DRD_ <u>×_</u> CD	Inclination;	
Hole No.:	EP #48		Collar Elev:	221.0
Date Drilled:	3/29/66	Started 2:00 pm	Logged By:	нжн

Completed 4:55 pm

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
0.0	20.0	20.0	Recent Aluvium. Set 3' Casing. Sampled			tr	
20.0	40.0	20.0	Recent Aluvium. Sampled			0.11	
40.0	60.0	20.0				0.22	
60.0	65.0	5.0	Recent Aluvium			0.22	
65.0	70.0	5.0	Recent Aluvium			0.20	
70.0	75.0	5.0				0.14	
75.0	80.0	5.0	Recent Aluvium. Hole Caved. Mudded Hole. Very fine			0.14	
	ļ		No circulation			0.10	
80.0	85.0	5.0	Recent Aluvium. Poor Sample & Circulation			0.17	
85.0	90.0	5.0	Brown, Iron Stained, Granitic appearing Gila Cg. Tr. Cu			.32	
			Contact 85.0'. Good Returns		· ·	.52	
90.0	95.0	5.0					
			Brown, Granitic appearing Gila Cg. Tr. Cu. Poor Sample			.18	t i
95.0	100.0	5.0	Gray to Black, Iron Stained Gila Cg. Much Qts in cuttings			.10	
			Tr. Cu. Mudding Hole			• 10	
100.0	105.0	5.0				.06	
105.0	110.0	5.0	Tan, Gray Altered Appearing Gila Cg. Tr. Cu. Soft		1	.08	
110.0	115.0	5.0	Hole Caved at 110.0' Mudded Hole. Tan to GrayGila Cg.			.08	
			Much Qts. but soft drilling. Poor Sample			.05	
115.0	120.0	5.0	Tan to Gray Gila Cg. Much Qts. Tr. Cu. Better circulation			06	
			but still soft and caving. Good Sample			.06	
120.0	125.0	5.0	Tan, Gray Gila Cg. Much Qts. Soft. Tr. Cu.			.07	
	130.0	5.0	Gila Cg. to 128.0' Contact of Brown, Highly Altered Granite			.07	
130.0	135.0	5.0	Brown Highly Altered Granite. Soft. Strongly Iron Stained			.04	
			Kaolonite			tr	
135.0	140.0	5.0	Same as above. Kaolonite			.05	
	145.0	5.0				.03	•
	150.0	5.0	Fresher Tan to Gray, Iron Stained Granite. Harder			.05	
	155.0	5.0	Brown, Highly Altered Granite. Kaolonite	·.	1	.04	
155.0	160.0	5.0	Same as above			.04	

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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

50,515 N 50,202 E Coordinates:

Property: Emerald Isle

Type of Drill: WD ___ DD ___

Inclination:

Hole No.: EP #49 (Sheet 1 of 2)

Logged By: H.W. Horst

Collar Elev: 183.0

3/30/66 Started 8:15 AM Date Drilled;

Completed 11:45 AM

CD

RD X

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
0.0	20.0	20.0	Recent Aluvium			.04	
20.0		20.0				.10	
40.0	60.0	20.0			1	.09	]
60.0		5.0				.18	
65.0	70.0	5.0				.20	
70.0	75.0	5.0	Tan, Gray, Gila Cg. Tr. Cu. Hard	· ·	4	.18	
75.0	80.0	5.0	Tan, Gray, Gila Cg. Tr. Cu Softer	- 44 - 14		.19	1
80.0	85.0	5.0	Black, Brown Gila Cg. Tr. Cu. Soft			.26	
	90.0	5.0	Brown, Iron Stained Gila Cg. Tr. Cu. Hard			.20	
90.0	95.0	5.0	Brown, Gray to Black Gila Cg. Tr. Cu. Hard			.24	
	100.0	5.0				.32	
100.0	105.0	5.0				.30	
105.0		5.0		1	1.1	.27	· ·
110.0	115.0	5.0				.26	
115.0	120.0	5.0				.28	
120.0	125.0	5.0				.30	1
125.0		5.0		}		.37	<b> </b> .:
130.0		5.0		ft 👘		.42	-
135.0		5.0	Tan, Gray, Black Gila Cg. Tr. Cu. Hard			•35	1
140.0		5.0	Tan to Gray Gila Cg. Hard. Tr. Cu			.26	
145.0		5.0	Brown to Black Gila Cg. Softer. Tr. Cu			.24	
150.0		5.0	Brown, Gray to black Gila Cg. Very hard. Tr. Cu	1.1	1	.26	
155.0		5.0	Brown, Gray to black Gila Cg. Very hard. Tr. Cu			.36	
160.0		5.0	Brown, Black Gila Cg. Softer. Tr. Cu			.31	
165.0		5.0	Brown, Gray to Black Gila Cg. Softer. Tr. Cu			.32	
170.0 175.0		5.0	Brown, Gray Gila Cg. Tr. Cu			.18	
180.0		5.0 5.0		· ·		.28	
	190.0	5.0		had		.25	
10).0	190.0	7.0	appearence	rea		10	1
190.0	105 0	5.0	Brown to black, Heavily Iron stained Gila Cg. Soft. Tr.	<b>-</b>		.18	
1,90.0	197.0	<i></i>	Weathered, altered appearence. Clay seam (Kaolonite)		1	.44	
•			in at 194.0. Hole damp & sample contact 194.0		1	• 44	
195.0	200.0	5.0	Brown to greenish cast, highly altered gnessic granite				
-,,			granite. Heavily Iron stained		511	1.10	(?)
200.0	205.0	5.0	Greenish, Brown, Highly altered and Iron stained genssic			1	l · · <b>/</b>
			granite			1.25	(2)
205.0	210.0	5.0	Brown, Heavily Iron stained, gnessic granite. Kaolonite	Boft.		1.64	123
	· · ·				1		
•	1	8		4			1

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

 Property:
 Emerald Isle
 Coordinates:

 Type of Drill:
 WD _____ DD ____ RD X_ CD _____ Inclination:
 Inclination:

 Hole No.:
 EP #49 (Sheet 2 of 2)
 Collar Elev: 183.0

 Date Drilled:
 3/30/66
 Logged By: HWH

PROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASS	SAY
110.0	215.0	5.0	Brown, heavily Iron stained, gnessic granite. Kaolonite. Hole very damp. Circulation poor and returns cut off. Hole bottomed.	Soft	1.05 (?)
 •					
·					

Property: Emerald Isle

150

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Coordinates:

50,580 N 50,078 E

Type of Drill: WD ___ DD ___ RD __ CD ___ Inclination: Hole No.: EP #50 Started 12:45 PM Collar Elev: 184.0 Logged By: H.W. Horst

Date Drilled: 3/30/66 Completed 5:00 PM (Sheet 1 of 2)

PROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASSA	Y
0.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0 55.0 60.0 65.0 70.0 75.0 80.0	20.0 25.0 30.0 35.0 40.0 50.0 55.0 60.0 65.0 70.0 75.0 80.0	20.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Recent aluvium. Sampled. Set 3' Casing """"""""""""""""""""""""""""""""""""			.15 .32 .30 .32 .23 .23 .19 .12 .12 .12 .12 .12 .12 .12 .12
85.0 90.0 95.0	85.0 90.0 95.0 100.0	5.0 5.0 5.0	Recent Aluvium """ Contact of Gila Cg. Black at 94.0' Brown, heavily stained Gila Cg. Granitic in appearence Harder. Tr. Cu			tr. .15 .11 .16
105.0 110.0 117.0 120.0 25.0 -30.0 -35.0	110.0 115.0 120.0 125.0 135.0 135.0 140.0	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Brown, heavily iron stained Gila Cg. Tr. Cu. Hard Brown, heavily Iron stained Gila Cg. Tr. Cu. Hard Brown, black heavily Iron stained Gila Cg. Tr. Cu. Hard Brown, black, Iron stained Gila Cg. Very Hard. Tr. Cu Brown, black, Iron stained Gila Cg. Much Qts. Very Hd.Tr. C Brown, Gray to black Gila Cg. Very hard. Tr. Cu Brown, Gray to black Gila Cg. Very hard. Tr. Cu Brown, Gray to black Gila Cg. Softer. Tr. Cu	r		.25 .24 .28 .33 .39 .39 .39 .29 .39
45.0 50.0 55.0 .60.0	145.0 150.0 155.0 160.0 165.0 170.0 175.0	5.0 5.0 5.0 5.0 5.0	Brown, gray to black, Iron stained Gila Cg. Tr. Cu. Med. Ha Brown, Gray Gila Cg. Med. Hard. Tr. Cu Same as above. Tr. Cu Tan, gray Gila Cg. Tr. Cu. Medium hard Tan, gray Gila Cg. Tr. Cu. Hard Tan, gray Gila Cg. Tr. Cu. Hard Tan, gray Gila Cg. Tr. Cu. Wery hard	rđ		.53 .48 .44 .49 .42 .36 .26
175.0 185:8 190.0	180.0 185.0 190.0 195.0	5.0 5.0 5.0	Tan, Gila Cg. Iron stained. Hard Tan, gray Gila Cg. Soft streak, altered at 183.0' Tr. Cu. Gray to tan Gila Cg. Hard. Tr. Cu Brown, black Gila Cg. Softened. Altered, weathered appear Tr. Cu		lite	.24 .18 tr. tr.

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Emerald Isle Property: Coordinates: Type of Drill; WD ___ DD ___ RD __ CD ____ Inclination: Hole No.: EP #50 (Sheet 2 of 2). Collar Elev:

FT. ASSAY FROM TO DRILL DESCRIPTION OF MATERIAL AND REMARKS 195.0 200.0 Brown, heavily Iron stained. Altered appearing Gila Cg. Tr. Cu 5.0 tr. KHAXXXXX Kaolonite 1.17 250.0 5.0 Tan, Gila Cg. Tr. Cu tr. 205.0 210.0 5.0 Tan, altered appearing Gila Cg. Kaolonite Tr. Cu Softer tr. 210.0 215.0 5.0 Brown, Iron stained Gila Cg. Tr. Cu Soft tr. 215.0 220.0 5.0 Brown, Iron stained Gila Cg. Soft. Tr. Cu tr. 220.0 225.0 5.0 Black Gial Cg. Soft. Tr. Cu tr. 225.0 230.0 5.0 Black, Brown Gila Cg. Med. Soft. Tr. Cu tr. 230.0 235.0 5.0 Black to brown altered appearing Gial Cg. Tr. Cu. Soft tr. 235.0 240.0 5.0 Black, brown, altered Gila. Soft. Tr. Cu. Clay in Cuttings Contact 239.0' tr. 240.0 245.0 5.0 Brown altered Granite 245.0 tr. 250.0 Poor air circulation. Hole packing due to moisture. Brown 5.0 altered Granite. Put water in hole to check last five feet cuttings. Altered grinite in cutting when water used to wash out hole tr.

Date Drilled: 3/30/66

HWH Logged By:

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,634 N 49,958 E
Type of Drill: WD DD RD CD	Inclination;	
Hole No.: EP #51 (Sheet 1 of 2)	Collar Elev:	182.0
Date Drilled: 3/31/66 Started 8:00 AM	Logged By: H	.W. Horst

Date Drilled: 3/31/66 Started 8:00 AM Completed 2:00 PM

	1	FT.			ASS	AY	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			•	
0.0	20.0	20.0	Recent Aluvium. Set Casing to 3'. Sampled			tr.	
20.0	40.0	20.0	" " Sampled. Hole caving. Mudded Hole			.24	
40.0	60.0	20.0	" " Hole caving. Mudding Hole	<i></i>		.30	
60.0	80.0	20.0	Recent Aluvium			.24	
80.0	85.0	5.0	11 March 1997 March 1997 And Anna State Stat State State State State State Stat State State S			.19	
85.0	90.0	5.0	n an an an an an an ann an Anna an Anna an Anna an Anna an ann an		l	.19	
90.0	95.0	5.0	이 같이 같아요. 이 것 같아요. 이 가 있는 것 같아요. 이 있 않는 것 같아요. 이 것 않는 것 같아요. 이 것 같아요. 이 것 같아요. 이 것 같아요. 이 것 이 것 않는 것 같아요. 이 것 같아요. 이 것 이 것 않는 것 같아요. 이 것 이 것 않는 것 이 것 않는 것 이 것 않는 것 이 것 않는 것 이 것 이 없 ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?			.19	
95.0 100.0	100.0	5.0			· ·	.18	
1.05.0	105.0 110.0	5.0				.21	
110.0	115.0	5.0 5.0	17 The second se Second second sec			.20	
115.0	120.0	5.0	$\mathbf{H}$ , the second se	$\bar{v}$	<b>.</b> .	.16	
120.0	125.0	5.0	II II Compatibul Trant			.13	
125.0	130.0	5.0	" " Somewhat Harder		1997) 1997 - 1997 1997 - 1997	.12	
130.0	135.0		H H H H H H H H H H H H H H H H H H H	1.5		.11	
135.0	140.0	5.0	1. M. A. Martin H. B. Statistical and the statistical strain of the statistical strain of the statistical strain of the statistical strain of the strain of the statistical strain of the strain of	e alla Maria		.11	
140.0	145.0	5.0	Had to wash hole with water due to curculation problems.	6. 100		.12	
			Poor sample return & circulation. Recent aluvium				
	150.0	5.0	Dame as adove	1.1	1.1	.16	
1	155.0	5.0	Improved circulation. Contact of Black Gila Cg. at 153.0		i anti-	.18	
				• · · · ·			
155.0	160.0	5.0	Black to brown Gila Cg. Logsely consoledated. Tr. Cu			.31	
60.0	165.0					•33	
165.0	170.0		Tan, very hard, highly silicified Gila Gange Gange			.72	
170.0	175.0	5.0	1 101 Stained, nighty silicified dite de des a			1.29	
175.0	180.0	5.0	I have a starned, highly silicified Gile. Vow Hd. Good	<b>A</b>	Į .	1.12	
180.0	185.0	5.0	Diown, Gilla og. boild sureak - 101 - 105.0. Fair Cu	cu		1.10	
185.0	190.0	5.0	B wn, Gila Cg. Alternating soft & hard streaks. Soft		1	.77	
100.0			streaks appeared altered. Tr. Cu			.48	
190.0	195.0	5.0	Tan, gray Gila Cg. Hard. Tr. Cu		1	.34	
195.0 200.0	200.0	5.0				.31	
200.0	205.0	5.0	Tan, gray to black Gila Cg. Alternating soft & hard stree	iks	19		4
205.0	210.0	EO	Tr. Cu			.37	
210.0	215.0	5.0 5.0	Gray, black Gila Cg. Alternating soft and Hd. Tr. Cu		·	.42	. •
215.0	220.0	5.0	Gray, Black Gila Cg. Soft. Tr. Cu Gray, black Gila Cg. Soft. Tr. Cu			•39	
220.0	225.0	5.0	Gray, black Gila Cg. Soft. Tr. Cu Brown, black Gila Cg. Soft. Tr. Cu			.31	
225.0	230.0	5.0	Brown, black Gila Cg. Soft. Tr. Cu. Altered appearence			•33	
	Γ	, ,,,, , , , , , , , , , , , , , , , ,	Brown, black & white Cg. Soft. Altered appearence, Tr. C	L			
			Hole getting damp. Reduced volume of sample			.24	

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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle

Coordinates:

 Type of Drill: WD _____ DD ____ RD x CD _____ Inclination:

 Hole No.: EP #51 (Sheet 2 of 2)
 Collar Elev:

 Date Drilled: 3/31/66
 Logged By: HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	·····
230.0	235.0	5.0	Brown, black & white Cg. Soft. Altered appearence, Tr. ( Hole getting damp. Reduced volum of sample. Poor	1	. с.		
235.0	240.0	5.0	Circulation and return Brown, black & white, altered material. Kaolonite. Tr. ( Poor caculation. Poor returns	μ		.22 .22	
240.0	245.0	5.0	No semple. No returns. Fines from bottom of hole had altered granitic appearence. Brown. No circulation				24 -
			and hole bottomed. All rods pulled from hole heavily caked and coated with mud from bottom of hole.				
			nnar o van ralation av valation			•	
						·	•

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Logged By:

H.W. Horst

 
 Property:
 Emerald Isle
 Coordinates:
 50,751 N 49,961 E

 Type of Drill:
 WD _____ DD ____ RD ___ CD ____ Inclination:
 The contraction:

 Hole No.:
 EP #52
 Collar Elev: 182.0

Date Drilled: 3/31/66 Started 3:00 PM 4/1/66 Completed 4:00 PM

	1	1 13/17				4.94	
FROM .	TO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
0.0 20.0	20.0 40.0	20.0	Recent Aluvium. Set 3' Casing. Sampled """Sampled		1	.10	-
40.0	60.0	20.0				tr.	· · · ·
60.0		20.0				tr.	
	100.0	20.0				tr.	
	105.0	5.0				tr.	
	110.0	5.0	11 11 11		1	tr.	
110.0		5.0	tt tr tr	÷	917	tr.	
	120.0	5.0	tt tt			.20	• ÷
	125.0	5.0				.18	C.
	130.0	5.0	Consolidated			.24	
	135.0	5.0	Recent Aluvium to 134.0'. Brown Gila Cg. at 139.0. Tr. Cu	• • •		.28	
135.0		5.0	Brown, gray Gila Cg. Very hard. Tr. Cu	i di serte		•35	
140.0		5.0	Brown, gray, Gila Cg. Very Hard Tr. Cu			.39	
145.0		5.0	Brown, Gila Cg. Very soft. Clay in cuttings. Tr. Cu	1999 - A.		.26	· · ·
150.0		5.0	Brown to gray Gila Cg. Soft. Altered appearance Tr. Cu	$(-, \mu) \in \mathbb{R}^{n}$		.28	
155.0		5.0	Brown, black Gila Cg. Med. Hard. Very black at 139.0. Tr.	a		•36	
160.0		5.0	Brown, black Gila Cg. Hard. Good Cu	Cu	1	•39	
165.0		5.0	Brown, gray Gila Cg. Hard. Good Cu			1.13	
	175.0					1.45	
	180.0					1.50	1
•••	185.0					1.44	
185.0	190.0	5.0				1	
190.0		5.0	Black, gray, Gila Cg. Hard. Very good Cu	÷.		1.33	
195.0		5.0	Brown, black Gila Cg. Hard. Good Cu		ļ	1.10	1.0 2 - 3
200.0		5.0		-0		1	
	210.0	5.0				.83	1.4
	215.0	5.0	Brown Gila Cg. Soft. Altered appearance. Gair Cu		1.1	.98	
215.0		5.0	Brown, heavily Iron stained Gila Cg. Soft. Tr. Cu. Altered			.56	
	1	<i></i>	appearance	1.	1		
220.0	225.0	5.0		÷		.44	
			No returns or circulation. Hole wet. Small sample & poor.		n di N		
225.0	0.059	5.0	Probably not from bottom of hole. Contact (220.0?) Same as above			.31	
230.0		5.0				.28	
235.0		5.0	Returns from bottom of hole. Brown, altered granite			.26	
		2.0	Brown altered Granite. Good sample & returns			.20	
					[		

Sec. 19

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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,872 N 49,938 E
Type of Drill: WD DD RD X CD	Inclination:	• • • • • • • •
Hole No.: EP# 53	Collar Elev:	192.0'
Date Drilled: 4/2/66 Started 8:00 AM Completed 11:30 AM	Logged By:	H.W. Horst

	1	FT.		1	ASS	AY	
FROM .	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
		00.0	Recent Alaurium Coursed			+	1
00.0		20.0	Recent Aluvium. Sampled			tr.	ł
20.0 40.0		20.0		ļ		tr.	<b>1</b> .
40.0 60.0		20.0	17 77 11 17 17 17	1		tr.	l
80.0	100.0			ļ	1 · ·	tr. tr.	
100.0	100.0		TI T	۱.	]	tr.	ł
105.0	110.0				1	tr.	l
110.0	115.0		11 • 11		1.	tr.	<b>I</b> .
115.0	120.0			ł	1	tr.	1.
120.0	125.0		Recent Aluvium			tr.	[
125.0	130.0			Į	<b>.</b>	tr.	l di
130.0	135.0		17 17	1		tr.	· ,
135.0	140.0		11 11 E	ł	$-e_{1}$	tr.	
140.0	145.0		11 17			tr.	
145.0	150.0		Recent Aluvium to 148.0'. Contact black Gila Cg. at 148.0			.14	
150.0	155.0	5.0	Brown, Iron stained Gila Cg. Hard. Some black. Fair Cu			.26	
155.0	160.0	5.0	Gray to black Iron stained Gila Cg. Hard. Fair Cu	1		.50 -	ľ
160.0	165.0	5.0	Gray to black. Iron stained Gila Cg. Alternating hard to	1	ļ · ·		
17 C = +			soft streaks. Fair Cu	· ·	[	•53	
	170.0		Black to brown, alternating soft to hard Gila Cg. Tr. Cu	1	1	•39	
	175.0		Black, brown, Iron stained Gila Cg. Med. Hard. Tr. Cu	1	<b>.</b>	•35	and the second sec
175.0 180.0	180.0		Black, brown, Iron stained Gila Cg. Hard. Fair Cu	ł		•59	ļ
185.0	185.0 190.0		Black, gray Iron stained Gila Cg. Hard. Fair Cu Black, gray, Iron stained Gila Cg. Hard. Good Cu	1		.67	
190.0	190.0			۱.,	l	.83 1.06	l
195.0	200.0			1	<b>1</b>	1.21	ļ
200.0	205.0		Brown, some black Gila Cg. altered appearance. Good Cu	1		•95	
205.0	210.0	-	Brown, Iron stained Gila Cg. to 209.0. Altered Granite	1	<b>(</b> i	•77	
200.0			209.0 Contact		1	.76	
210.0	215.0	5.0				.48	
215.0	220.0		Brown, Iron stained Granite. Kaolonite. Soft.		f	.41	
220.0	225.0		Brown, heavily Iron stained, altered Granite. Kaolonite.	Soft.			
-,			Hole wet & damp.			.46	
225.0	230.0	5.0				•37	
l I				Ì			
1. 				• `,		1	•
		i i			1	1	

## EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,714 N 50,173 E
Type of Drill: WD DD RD X CD	Inclination:	na series de la companya de la comp La companya de la comp
Hole No.: EP #54 (Sheet 1 of 2)-1st Try 20.0' 2nd Try	Collar Elev:	191.0'
Date Drilled: 4/2/66 Started 12:30 PM 4/3/66 Completed 10:30 AM	Logged By:	H.W. Horst

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	АҮ	
0.0		20.0				.28	
20.0		20.0	" " Hole caving badly at 35.0'			.40	
40.0	60.0	20.0	" " Poor sample. Reduced circulation			•30	
		1.0.0	Good from 53.0' - 60.0'		44 () 		
60.0		10.0	Recënt Aluvium. Sampled			.30	
70.0		10.0	11 11 11 11 11 11			.32	
80.0		5.0	<i>u u</i>			.30	
85.0 90.0		5.0 5.0	" " to 93.0'. Contact black Gila Cg. 93.0. Tr	Chi		.28 .27	
	100.0		Black, brown Gila Cg. Hard. Tr. Cu	· u		.25	
100.0		5.0		-	- P	.39	
105.0		5.0				.58	-0120
110.0	3	5.0			1	.66	
115.0						.65	
120.0		5.0				.41	
125.0			Gray, tan Gila Cg. Iron stained. Med. Hard. Good Cu			.70	
130.0		5.0				.88	
135.0		5.0				•95	
140.0					1	1.14	
145.0						1.61	
150.0		5.0			[	1.39	
155.0		5.0				1.10	
160.0		5.0				1.17	
	170.0					1.01	
-	175.0					1.11	
	180.0	5.0			5 A.	.99	
	185.0		Black, brown, Gila Cg. Softer. Kari Fair Cu			.73	
	190.0					.78	
	195.0				· ·		
			Cu. Granitic character. Soft	- C		•59	
195.0	200.0	5.0					
	1		appearance, Fair Cu. Soft.			.60	
200.0	205.0	5.0	Brown, Granitic appearing Gila Cg. Altered. Tr. Cu. Poor	94 	1. 1.		
			returns & sample. Hole getting damp.			.44	
205.0	210.0	5.0					
207.0			Cu. Soft. Better sample & returas			.61	1
210.0	215.0	5.0	Brown, highly Iron stained Gila Cg. Fair Cu. Soft	<i>x</i>		.56	
. · ·			Fair returns & circulation	1			
1 - marine and a star and a star	Collector de la colección de la	l Malaine second					•

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:
Type of Drill: WD DD RD X CD	Inclination;
Hole No.: EP #54 (Sheet 2 of 2)	Collar Elev:
Date Drilled: 4/2/66	Logged By: H.W. Horst

FROM	TO	FT. DRILL				ASSAY			
		<u> </u>							
215.0	220.0	5.0	Brown, highly Iron stained Gila Cg. Hole damp. Dry sample still returning soft. Tr. Cu. Strong Granitic appearan Kaolonite.	ce.		•33			
220.0	225.0	5.0	Water in hole at 220.0'. Hole would not flow water but sample wet. Altered Granite bedrock 220.? Contact			•55			
225.0 230.0	230.0 240.0	5.0 10.0	Wet sample. Altered, brown Granite. Kaolonite Wet sample. Altered, brown Granite. Kaolonite			.26			
					• •				
						1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19			
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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates: $50,688$ N 49,860 E	
Type of Drill: WD DD RD X CD	Inclination:	
Nole No.: EP #55	Collar Elev: 180.0	
Date Drilled: 4/366 Started 11:15 AM	Logged By: H.W. Horst	

Completed 5:00 PM

rogged by:

 • •	• •	 <b>U</b> 1	

	1	FT.	1	1	ASS	٨٧	· · · · · · · · · · · · · · · · · · ·
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ADD	AI	
0.0	20.0	20.0	Recent Aluvium. Set 3' casing. Sampled			tr.	
20.0		20.0				tr.	
40.0	60.0	20.0				tr.	- 
60.0	80.0	20.0	II			tr.	
80.0	100.0	20.0	Market			tr.	
100.0		20.0	n n n de la nacional de la companya	[		.20	
120.0	125.0			- ²		.31	
125.0	130.0		tt tt tt	ļ		.28	
130.0	135.0	5.0				•34	
135.0	140.0		tt tt		14	.26	
140.0	145.0	5.0				.18	
145.0	150.0	5.0			1	.16	
150.0	155.0		" " Somewhat consolidated		1. N.	tr.	
155.0	160.0		" " to 157.0'. Contact brown, hard Gila Cg.	Tr. Cu		.16	
160.0	165.0	1 7	Brown, Iron stained Gila Cg. Tr. Cu. Hard to soft.			.22	
165.0	170.0		Hard, brown, Iron stained, Gila Cg. Tr. Cu		1	.28	
170.0	175.0		Gray, brown, Iron stained Gila Cg. Tr. Cu. Hard		14	.28	
175.0	180.0		Gray, Iron stained Gila Cg. Fair Cu. Hard	1		.64	
180.0	185.0		Gray, black, Iron stained Gila Cg. Hard. Fair Cu			.56	•
185.0	190.0		Brown, black, Iron stained Gila Cg. Softer. Good Cu			•79	•
190.0	195.0		Brown, Gray, Iron stained Gila Cg. Hard. Tr. Cu		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	•43	
195.0	200.0		Black, brown, Gila Cg. Hard. Fair Cu			•49	
200.0	205.0		Black, brown Gila Cg. Hard. Good Cu			•74	
205.0	210.0	-	Black, brown, Gila Cg. Hard. Fair Cu	3		.66	
	215.0		Black, brown Gila Cg. Hard. Good Cu	je.		.89	
215.0	220.0		Brown, altered appearing Gila Cg. Tr. Cu	э. Эл		•43	
	225.0		Brown, altered appearing Gila Cg. Hard. Qtz. Pebbles. Tr.			.26	
225.0	230.0		Brown, highly Iron stained, Granitic appearing Gial Cg. T	r. Cu.	Soft	.25	
230.0	235.0	5.0	Brown, hgghly Iron stained. Altered Granite. Contact 230. Hole damp.			25	
235.0	240.0	5.0	Brown, highly Iron stained, altered Granite. Hole damp			.19	
					2		

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,816 N 49,861 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #56	Collar Elev:	186.0
Date Drilled: 4/4/66 Started 8:00 AM	Logged By:	H.W. Horst

Completed 2:30 PM

							· · ·	
FROM	M TO DRILL DESCRIPTION OF MATERIAL AND REMARKS				ASSAY			
0.0	20.0	20.0						
20.0		20.0	Recent Aluvium. Set Casing to 3'. Sampled			tr.		
40.0		20.0				tr:		
60.0						tr.		
	100.0	20.0				tr.		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	÷.	20.0	11 11			tr.		
	2	1		· ·		tr.		
	125.0				ĺ	tr.		
125.0 130.0	130.0				1 de 19	tr.		
135.0	135.0					tr.		
140.0						tr.		
1	145.0	9 <b>-</b>				tr.		
145.0	150.0			1		tr.		
150.0	155.0	9 <b>-</b>	Contact of Gila Cg. at 150.0'. Brown. Hard. Tr. Cu		1 ¹ ·	.23		
155.0	160.0	-	Brown, hard, granitic in appearance. Gila Cg. Tr. Cu			.22	· ·	
160.0	165.0	-	Gray, tan Gila Cg. Hard. Iron Stained. Tr. Cu			.24		
165.0	170.0		Black, Iron stained Gila Cg. Tr. Cu. Hard		Į	.26		
170.0	175.0		Black to gray Iron stained Gila Cg. Hard. Tr. Cu	1				
175.0	180.0		Black, Iron stained Gila Cg. Hard Tr. Cu			.22		
180.0	185.0		Gray, tan, Iron stained Gila Co. Very hard Good Co.			.22		
185.0	190.0	5.0	Gray, tan, Iron stained Gila Cg. Very hard. Highly silici Fair Cu	ied		1.05		
190.0	195.0	5.0				.61		
195.0	200.0	-	Tan, gray, highly silicified Gila Cg. Very hard. Fair Cu			.50		
200.0		2.0	Tan, gray, highly silicified. Gila Co. Very hard Good Co.			1.21		
200.0	205.0	5.0	Itan, gray, nighty sidicified, Iron stained Gila Go. Very	ard.				
205.0	210.0		GOOU CU	l i		1.56		
210.0	215.0	-	Tan, gray, highly silicified. Iron stained Gila Cg. V. Han	d. Goo	đ Cu	1.62		
				11	- 11	1.22		
215.0	220.0	5.0	Tan, gray, altered appearing Gila Cg. Softer. Good Cu		· ·	.87		
220.0	225.0	5.0	pry sample. Reduced circulation. Hole wet. Brown, altered	·····	1.1	.01		
			i Granite. Contact 220.0					
225.0	230.0	5.0	Brown, altered Granite. Kaolonite. Wet sample. Drilling		1.1	•38		
			with water to get returns. Some Cu noted in sample					
		1	probably from side of hole	·				
		ł				•59		
	1	1						

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. 0. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property:	Emerald Isle	Coordinates: 50,993 N 49,960 E
Type of Dril	1: WD DD RD $\underline{X}$ CD	Inclination:
Hole No.: E	P #57	Collar Elev: 202.0

Date Drilled: 4/13/66 Started 7:00 Am Completed 11:30 AM

Logged By: H. W. Horst

FROM	то	FT. DRILL	ASS DESCRIPTION OF MATERIAL AND REMARKS	SAY	
0.0	20.0	20.0	Recent Aluvium. Set casing to 3'	draa	
20.0	40.0			tr.	
40.0		20.0		tr.	
60.0		20.0		tr.	
80.0	100.0	20.0		tr.	
100.0	120.0	20.0	. If the second s	tr.	
120.0	140.0	20.0		tr.	
140.0	145.0			tr.	
145.0	150.0			tr.	
150.0	155.0			tr.	
155.0	160.0	-		tr.	
160.0	165.0	-		tr.	
165.0	170.0		17 17 17 17	.13	
170.0	175.0		Contact of black stained Gila Cg. at 170.0 Soft. Tr. Gu	.26	
175.0	180.0	-	Brown, Iron stained, black Gila Cg. Tr. Cu. Soft	•34	
180.0	185.0	-	Black Gila Cg. Tr. Cu. Harder	.41	
185.0	190.0		Black Gila Cg. Tr. Cu. Hard	.29	
190.0	195.0	5.0	Black to brown, Iron stained Gila Cg. Alternating Soft to Hd. Tr. Cu	.32	•
195.0	200.0	5.0	Same as above.	•35	
200.0	205.0	5.0	Brown, Iron stained Gila Cg. Alternating Soft to hard. Tr Cu	.24	
205.0	210.0		Brown, Iron Stained, Gila Cg. Medium Soft. Tr. Cu	.22	
210.0	215.0		Brown, black, Iron stained Gila Cg. Soft. Tr. Cu	.50	
215.0	220.0	5.0	Brown, black, heavily Iron stained Gila Cg. Soft. Tr. Cu	•39	
220.0	225.0	5.0	Brown, highly Iron stained Gila C.g to 222.0. Brown, altered,		
			Iron, stained Granitic material in at 222.0. Kaolonite Soft	.22	
	230.0		Brown, highly Iron stained Granite, altered, Kaolonite. Soft	.25	
230.0	235.0	5.0	Brown, highly Iron stained & altered Granite, mixed with seam		
			of Gnessic Granite at 230'. Soft, Kaolonite & Clay minerals	.24	
235.0	240.0	5.0	Brown, highly altered, Iron stained Granite. Strong weathering		
	۱ ا		with much Kaolonite and Clay minerals. Damp sample & hole. Soft	.28	
	245.0		Brown, Iron stained Granite. Medium soft. Fresher appearance	.22	
245.0	250.0		Brown, Iron stained Granite. Harder	.20	
250.0	255.0		Brown, Iron stained Granite. Hard. Med.	.22	
255.0	260.0	5.0	Brown, Iron stained Granite. Med. hard.	.19	
	. I			a a station	
	1.				

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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

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			DRILL HOLE		50, 536 N
Property:	Emerald Isle	<b>;</b>		Coordinates:	49,956 E
Type of Dr	111: WD	DD RD	<u>x</u> CD	Inclination:	
Hole No.:	EP #58 (She	et 1 of 2)	· · · ·	Collar Elev:	177.0
Date Drill	ed: 4/13/66	Started Completed	1:00 pm 6:00 pm	Logged By:	HWH

	1	FT.			ASS	ΔΥ	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
0.0	20.0	20.0	Recent aluvium. Set casing to 3'			.16	
	40.0	20.0	Recent aluvium.			.24	
	60.0	2	Recent aluvium ·		-	. 26	
60.0	80.0	20.0	Recent aluvium			13	
80.0	100.0	20.0	Recent aluvium	3		.11	
100.0	120.0	20.0	Recent aluvium			tr.	
	125.0	5.0	Recent aluvium			tr.	
125.0	130.0	1	Recent aluvium		• •	. 15	
130.0	135.0		Recent aluvium			.13	
	140.0	Q	Recent aluvium			. 24	
140.0	145.0	5.0	Recent aluvium to 144.0'. Contact, Black, Soft Gila			. 28	
			Cg. at 144.0'. Tr. Cu		<b>1</b> .		6
145.0	150.0	1	Black Gila Cg. Leached appearance. Tr. Cu. Soft			.45	
150.0	155.0	5.0	Brown, iron stained Gila Cg. Med. Hard. Tr. Cu			.41	
155.0	160.0	5.0	Brown, iron stained Gila Cg. Med. Hard. Tr. Cu. granitic in				12
			appearance		· ·	. 37	
160.0	165.0	5.0	Tan, Gray, iron stained Gila Cg. Granitic in appearance. Hard				•
			Tr. Cu.		÷.	. 24	
165.0	170.0	5.0	Tan, Gray, altered appearing Gila Cg. Iron stained. Soft. Tr Cu	L		. 36	
170.0	175.0	5.0	Brown, altered. Iron stained Gila Cg. Soft. Tr. Cu.			.42	
175.0	180.0	5.0	Tan, altered, iron stained Gila Cg. Soft. Tr. Cu. Leached appear	ance	×.	. 38	
180.0	185.0	5.0	Brown, altered, iron stained Gila Cg. Soft. Tr. Cu. Leached appe			. 36	
185.0	190.0	5.0	Brown, altered, iron stained Gila Cg. Soft. Tr. Cu. ""	11		. 32	
190.0	195.0	5.0	Same as above. Tr. Cu.			. 30	
195.0	200.0		Brown, very altered, granitic appearing Gil Cg. Very Soft. Tr C	1	-	. 18	
200.0	205.0	5.0	Same as above. Tr. Cu. Leached appearance	-		.18	
205.0	210.0		Brown, very altered, granitic appearing Gila Cg. Soft. Tr. Cu.			. 20 °	
			Leached appearance		•	. 20	
210.0	215.0	5.0	Brown, altered, leached appearing Gila Cg. Granitic appearance	Soft	×		
			$Tr Cu \qquad \qquad 219 - 19$	Don		. 22	
215.0	220.0	5.0	Brown, altered leached appearing Gila Cg. to 319.0. Contact			.18	
1			Brown, altered granitic material at 219.0 (Contact?)	:			
220.0	225.0		Brown, altered, iron stained granitic material. Soft			.15	
	1	1			5 15. 1.1		
	1 .	l		1.11			

## EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

DRILL HOLE LOG

Property:

Coordinates:

 Type of Drill: WD ____ DD ___ RD x CD ____ Inclination:

 Hole No.: EP #58
 Collar Elev:

Date Drilled:

Logged By:

	1	FT.			ASS	AY	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
225.0	230.0	5.0	Brown, altered, iron stained granitic material. Med. hard.			.18	
230.0	235.0	1	Brown, altered, iron stained granitic material. Med. Hard			.10	·
235.0	240.0		Brown, iron stained granitic material. Altered. Hard			.13	
240.0	245.0	5.0	Brown, iron stained granitic material. Much Qts. Hard.				
			Fresher appearance. Poor circulation and sample return			.12	
245.0	250.0	5.0	Poor circulation and sample. Pressure going up. Brown, iron		· ·		l
		1	stained granitic material. Fresh appearance. Much qts.			<i>i</i> .	l
			in cuttings returned. Hole bottomed. Hole tight and rods				l
			stuck in hole at 220.0'. Near contact picked. Last five rods	•			
			pulled completely covered with mud. Very stocky.			1.11	1
	]						1

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

		50,586 N
Property: Emerald Isle	Coordinates:	49,861 E
Type of Drill: WD DD RD CD	Inclination:	•
Hole No.: EP #59 (Sheet 1 of 2)	Collar Elev:	178.0
Date Drilled: 4/14/66 Started 8:00 am 4/15/66 Completed 12:30 pm	Logged By:	HWH

	t	FT.		ASS	ΔY	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ADD.	<b>**</b>	ţ
0.0		20.0	Recent aluvium. Set 3' casing. Many boulders		tr.	
20.0	1	20.0	Recent aluvium. Many boulders		tr.	
40.0	60.0	20.0	Recent aluvium. Rollers broke off bit. Twisted rods in hole.			
			Broke break out tong. Down for repairs. Started again at 2:00 pm			
60.0	80.0	20.0	Recent aluvium. Boulders and remnants of bit in hole. Fished out pieces of bit.		. 15	
80.0	100.0	20.0	Recent aluvium. Many boulders		.13	
100.0			Recent aluvium. Many boulders	· ·	.13	
1	140.0	2	Recent aluvium		tr.	
140.0	1	8	Recent aluvium	· ·	tr.	
1	150.0		Recent aluvium		tr.	
	155.0		Recent aluvium		. 19	
1	160.0		Recent aluvium		. 33	-
	165.0		Recent aluvium to 162.0'. Gray, iron stained Gila Cg. Tr. Cu.		. 37	
			Contact 162.0'			
165.0	170.0	5.0	Tan, gray, iron stained Gila Cg. Hard. Much Qts. Tr Cu		. 31	
170.0	175.0	5.0	Tan, gray, iron stained Gila Cg. Hard. Much Qts. Tr Cu		.38	÷.
175.0	180.0	5.0	Tan, gray, iron stained Gila Cg. Alternating soft & hard streaks. Tr Cu	١	. 36	đ
180.0	185.0	5.0	Tan, gray, iron stained Gila Cg. Med. Hd. Tr. Cu.	v.	. 33	
185.0	190.0	5.0	Tan, zer iron stained Gila Cg. Med. Hd. Tr. Cu.	1	.43	
190.0	195.0	5.0	Tan, iron stained Gila Cg. Med. Hd. Tr. Cu.		. 36	
195.0	200.0	5.0	Brown, highly iron stained, altered Gila Cg. Granitic in			
			appearance. Kaolonite. Tr. Cu.	·•	. 30	9
	205.0	1	Hole wet with water standing from setting overnight. no sample		no sar	hple
1	210.0	8 1	Small sample return but hole drying out. Tr. Cu.		. 22	
	215.0	I 1	Brown, heavily iron stained Gila Cg. Med. Hd. Good return. Tr. Cu.		. 31	
215.0	220.0	5.0	Brown, soft, heavily iron stained Gila Cg. to 218.0.		. 27	
•			Hard gray gila cg. 218.0'. Tr. Cu.			1
	225.0		Brown, heavily iron stained Gila Cg. Alternating Hd. to Soft. Tr. Cu.	:	. 24	
225.0	230.0	5.0	Brown, heavily iron stained Gila Cg. Astronating the Altered.			
			Soft. Tr. Cu. Leached appearance		.24	
230.0	235.0	5.0	Brown, Black, iron stained Gila Cg. Altered, Leached appearance.		. 23	
10			Tr. Cu.		943 1	ین ۱۹۰۹ ۱۹۹۹ - ۲
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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Prope	erty:		Coordinates:
Туре	of Drill: WD	DD RD CD	Inclination:
Hole	No.: EP #59	(Sheet 2 of 2)	Collar Elev:
Date	Drilled:		Logged By:

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
235.0	240.0	5.0	Brown, black, iron stained Gila Cg. Hole getting wet. Reduced volume of sample. Poor circulation. Pressure rising. Going to water return for drilling and cuttings				
240.0	245.0	5.0	Contact of tan, altered, soft granite. Wet sample			.20	
245.0	250.0	5.0	Tan, soft, altered granite. Kaolonite. Qts. and feldspar in large pieces. Wet sample. Mica	ı		. 26	
250.0	255.0	5.0	Same as above		L	. 42	
255.0	260.0	5.0	Tan, soft altered granite. Kaolonite. Large pagi pieces of quartz and feldspar. Mica.			. 42	
					· ·	.10	

## EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

		· .	DRILL	HOLE	LOG	50,933 N
Property:	Emeral	d Isle			Coordinates:	50,175 E
Type of Drill:	WD	DD RD	<u>x</u> CD		Inclination:	
Hole No.:	E <b>P</b> #60				Collar Elev:	190.0
Date Drilled:4	/15/66	Started	2:00 pm		Logged By: HV	WH

Completed 5:30 pm

FROM	TO	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY			
<u> </u>	1	20.0	Recent aluvium. Set 3' casing			tr.	
20.0	40.0	20.0	Recent aluvium			tr.	1. A.
40.0	60.0	20.0	Recent aluvium			tr.	
60.0	80.0	20.0	Recent aluvium			tr.	
80.0	100.0	20.0	Recent aluvium			tr.	• 2
100.0	105.0	5.0	Recent aluvium			tr.	
105.0	110.0	8	Recent aluvium			tr.	
110.0	115.0	1	Recent aluvium			0.12	
115.0	120.0		Recent aluvium		÷.,	0.11	
120.0	125.0	8	Recent aluvium		21	0.15	
125.0	130.0	5.0	Recent aluvium to 127.0. Contact of Tan, Med. Hd. Gila Cg.			0.44	
			at 127.0. Fair Cu				ł
130.0	135.0		Tan, iron stained Gila Cg. Hard. Fair Cu			0.57	
135.0	140.0	1	Tan, grey, iron stained Gila Cg. Hd. Fair Cu			0.71	
140.0	145.0		Tan, iron stained Gila Cg. Med. Hd. Fair Cu		- A	0.66	
145.0	150.0	<b>1</b> 1	Tan, gray, iron stained Gila Cg. Med. Hd. Fair Cu	•	1.	0.67	
150.0	155.0	5.0	Black, iron stained Gila Cg. Med Hd. Good Cu			0.76	1
155.0	160.0	5.0	Black, Gila Cg. to 157. Altered granitic material to 160.0 Tr			0.33	1
160.0	165.0	5.0	Hd. Qts stringer or boulder to 162. Black Gila Cg to 165.0 Tr	Cu	12	0.28	
165.0	170.0	5.0	Tan, highly altered granitic material at 166.0. Contact			0.22	
170.0	175.0	1	Brown, highly altered, iron stained granite. Kaolonite. Soft.		v	0.19	i i
175.0	180.0	1	Brown, highly altered, iron stained granite. Kaolonite. Soft.			0.19	• •
180.0	185.0	5.0	Brown, highly altered, iron stained granite. Soft. Kaolonite			0.21	
2000 - A.			Hole wet. Reduced volume of cuttings			1	
185.0	190.0	5.0	Same as above			0.12	1
190.0	195.0	5.0	Brown, heavily iron stained, altered granite. Kaolonite. Hole			0.11	
			getting wetter. Cuttings return cut off				
						£	
					,		
						1	1
							Į
							1

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

			DRILL HOLE LOG 50,933		м Ул	
	Proper	rty:	Emerald Isle Coordinates: 49,859	В		
	Туре о	of Dril	ll: WD DD RD x CD Inclination;	:	•	
	Hole I	No.:	EP #61 Collar Elev: 205.	0		
	Date I	Drilled	d: 4/16/66 Started 8:00 am Logged By: HWH Completed 4:00 pm			
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	AS	SAY	
0.0	20.0	20.0	Recent aluvium. Set casing to 3'		tr.	
20.0	40.0	20.0	Recent aluvium		tr.	
40.0	60.0	20.0	Recent aluvium		tr.	
60.0	80.0	20.0	Recent aluvium		tr.	
80.0	100.0	20.0	Recent aluvium		tr.	
100.0	120.0	20.0	Recent aluvium		tr.	añ. S
120.0	140.0	20.0	Recent aluvium		tr.	
140.0	145.0	5.0	Recent aluvium		tr.	
145.0	150.0	5.0	Recent aluvium		tr.	à
150.0	155.0	5.0	Recent aluvium		tr.	
155.0	160.0	5.0	Recent aluvium		tr.	
160.0	165.0	5.0	Recent aluvium		tr.	,
165.0	170.0	5.0	Recent aluvium		tr.	
170.0	175.0	5.0	Recent aluvium. Contact of tan Gila Cg. at 173.0. Tr Cu Soft		tr.	
	180.0	5.0	Tan, iron stained Gila Cg. Granitic in appearance. Tr Cu Med Hd		tr	
	185.0	5.0	Tan, gray, iron stained Gila Cg. Fair Cu. Hard	400	0.28	
185.0	190.0		Brown to tan, iron stained Gila Cg. Fair Cu. Hard		0.54	
190.0	195.0	*	Tan, gray, iron stained Gila Cg. Good Cu. Hard		0.54	
195.0	200.0		Tan, gray, iron stained Gila Cg. Good Cu. Hard		0.83	
200.0	205.0		Tan, gray, iron stained Gila Cg. Fair Cu. Hard	at a second	0.79	
205.0	210.0	5.0	Tan, iron stained Gila Cg. Fair Cu. Soft			
210.0	215.0	5.0	Tan to brown iron stained Gila Cg. Fair Cu. Hard		0.66	
215.0	210.0					-
213.0	220.0	5.0	Tan, iron stained Gila Cg. Very fine at 218.0'. Circulation	· · ·	0.28	
220 0	225 0	50	poor. Used water injection for returns. Fair Cu.	· _		
220.0	225.0	5.0	Poor circulation and returns. Using water injection. Green		0.57	
007 -			gnessic granite in sample. Contact at 222.0'			
225.0	230.0	5.0	Brown, highly altered, iron stained granite. Water injection		0.44	
			for sample return. Kaolonite			
230.0	240.0	10.0	Brown, highly altered, iron stained granite. Poor curculation	5. ¹⁸ 5	0.40	
			and returns. Used water injection to get return			
	1	3		1	1	

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isle	Coordinates:	49,759 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #62	Collar Elev:	203.0
Date Drilled: 4/17/66 Started 8:00 AM Completed 6:00 PM	Logged By:	H.W. Horst

		FT.	ASSAY
ROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS
0	20	20	Recent Aluvium. Set 3/ casing. tr.
20	40	20	" " tr.
40	60	20	" " tr.
60	80	20	""tr.
80	100	20	" " tr.
1.00	120	20	Recent Aluvium tr.
120	140	20	<b>tr.</b>
140	145	5	Recent Aluvium tr.
145	150	5	" " tr.
1.50	155	5	" " Somewhat consolidated tr.
1.55	160	5	" " " tr.
1.60	165	5	Recent Aluvium. Somewhat consolidated tr.
.1.65	170	5	11 11 11 11 tr.
1.70	175	5	Recent Aluvium to 174. Tan Gila Cg. at 174. Tr. Cu tr.
1.75	180	5	Tan, Gila Cg. Med. hard. Iron stained. Tr. Cu tr.
1.80	185	5	Tan, Iron stained Gila Gc. Tr. Cu .25
1.85	190	5	Tan, brown, Iron stained Gila Cg. Fair Cu. Hard .48
190	195	5	Brown, black, heavily Iron stained Gila Cg. Fair Cu. Med. hard .73
195	200	5	Brown, black, heavily Iron stained Gila Cg., Tr. Cu. Softer .42
500	205	5	Brown, Black, heavily Iron stained Gila Cg. Tr. Cu. Soft. AXAXXXXXXXX83
205	210	5	Hard, tan, gray Gila Cg. at 206.0. Iron stained. Good Cu .83
210	215	5	Tan, gray, very hard Gila Cg. Iron stained. Good Cu .80
215	220	5	Tan, gray, very hard, highly silicified Giaa Cg. Iron stained.
		-	Good Cu. Very good Cu at 219.0-220' .59 (?)
220	225	5	Tan, gray, highly silicified, Iron stained Gila Cg. very hd. Good Cu .51 (?)
225	230	5	Tan, gray, highly silicified. Iron stained Gila Cg. very hd. Good Cu .24 (?)
230	231	lí	Tan, Gila Cg. Good Cu. Bit broke in hole. Fished twice with magnet
-,,-	1 - 5-		to clear hole. Unsuccessful. Ruined two bits trying to drill
			thru. Cone, shank, & bearings
	1		

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

## DRILL HOLE LOG

Property: En	erald Isle	Coordinates:	50,815 N 49,670 E
Type of Drill:	WD DD RD X CD	Inclination:	- • · •,
Hole No.: EF	• <b>#6</b> 3	Collar Elev:	196.0
Date Drilled:	4/18/66 Started 9:00 AM	Logged By:	H.W. Horst

Completed 3:30 PM

1

FROM	TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		ASSAY				
0	20	20	Recent Aluvium. Set casing to 3		e e	tr.	
20	40	20			1	tr.	
40	60	20	<ul> <li>If the second secon second second sec</li></ul>	N.		tr.	
60	80	20		ł		tr.	
80	100	20	Recent Aluvium	1		tr.	
100	120	20	11. 11. In the second secon		1	tr.	
120	140	20	n an tha an			tr.	
140	150	10	Recent Aluvium			tr.	
150	155	5				tr.	1
155	160	<b>5</b> -		1.11	- · ·	tr.	
160	165	5	Recent Aluvium			tr.	
1.65	170	5	1 M. Martin M. M. Schuler, and A. Schuler, "A strain of the strain of			tr.	
170	175	5	" Changed bit			tr.	
175	180	5	Recent aluvium. Contact of Tan Gila Cg. Tr. Cu at 178.0		·	tr.	1. S.
180	185	5	Tan Gila Cg. Soft. Tr. Cu	6	1.	tr.	
185	190	5	Tan Gila Cg. Soft. Iron stained. Tr. Cu		1000 1000	tr.	
190	195	5	Tan, Gray Gila Cg. Med. hd. Iron stained. Fair Cu		1	.30	
195	200	5	Tan, gray, Iron stained Gila Cg. Hard. Good Cu Streak in	198.0	to		
			200.0. Fair Cu for 5'			•59	
200	205	5	Brown, black, heavily Iron stained Gila Cg. Soft. Fair Cu		14	.59	<b>[</b>
205	210	5	Balck, brown, heavily Iron stained Gila Cg. Soft, leached				<b>1</b>
010			appearance. Tr. Cu			.44	
210	215	5	Black, brown, heavily Iron stained Gila Cg. Soft, leached				
<u></u>			appearance. Tr. Cu			.36	
215	220	5	Tan, Iron stained Gila Cg. Highly silicified. Hard Good C	u in			
000	005		at 217.0'			.92	
220	225	5	Tan, gray Gila Cg. Hd. Highly silicified. Good Cu. Reduce				
005	000		volume of sample. Changed bit			1.21	1
225	230	5	Tan, black Gila Cg. Very hd. Highly silicified. Very good	Cu		1.73	
230	235	5	Tan, black Gila Cg. Very hd. Highly silicified. Very good	Cu		1.77	
235	240	5	Tan, black Gila Cg. Very hd. to 238'. Very good Gu to 238	Brow	h	•55	
			altered, Iron stained Granite at 238.0	1.00 1.00			
240 245	245	5	Soft, highly altered, Iron stained granite. Kaolonite			.44	
245	250	5	Same as above			.32	
250	255	5	Soft, highly altered, Iron stained Granite. Kaolonite		:	.26	
255 260	260	5	Soft, highly altered, Iron stained Granite. Kaolonite	e f	- •.	.26	
260	265	5	Soft, highly altered, Iron stained Granite. Kaolonite	9		.24	
265	270	5	Same as above			.40	ł
270	275	5	Brown, altered, Iron stained Granite. Harder			.28	:
275	280	5	Brown, altered, Iron stained Granite. Hard		and the second second	.13	

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

## DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,815 N 49,465 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #64 (Sheet 1 of 2)	Collar Elev:	174.0
Date Drilled: 4/18/66 Started 4:30 PM	Logged By:	H.W. Horst

4/20/66 Completed 1:30 PM - (Rain, Hail, Snow at 9:30 AM

245 250 5 Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd .68	FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
20       40       20       """"""""""""""""""""""""""""""""""""	0	20	20	Recent Aluvium			<u> </u>	
40 $60$ $20$ """ $60$ $80$ $20$ """ $80$ $100$ $20$ """ $100$ $120$ $20$ """ $120$ $140$ $20$ """ $120$ $140$ $20$ """ $120$ $140$ $20$ """ $120$ $140$ $20$ """ $120$ $140$ $20$ """ $140$ $145$ $5$ Recent Aluvium"tr. $155$ $150$ $5$ Recent Aluv. to $162.0.$ Contact Tan, Iron stained Gila Cg.tr. $155$ $160$ $5$ Recent Aluv. to $162.0.$ Contact Tan, Iron stained Gila Cg.tr. $157$ $160$ $155$ $5$ Recent Aluv. to $162.0.$ Contact Tan, Iron stained Gila Cg.tr. $170$ $175$ $5$ Tan, Iron stained Gila Cg.Tr. Cu. Hardtr. $170$ $175$ $5$ Tan, Fron stained Gila Cg. Tr. Cu. Hardtr. $180$ $185$ $5$ Tan, Iron stained Gila Cg. Tr. Cu. Hardtr. $185$ $190$ $5$ Soft, Tan, Iron stained Gila Cg. Tr. Cu.Hard $190$ $195$ $5$ Tan, Iron stained Gila Cg. Tr. Cu.Med. hard $190$ $195$ $5$ Tan, Iron stained Gila Cg. Tr. Cu. Med. hard $200$ $205$ $5$ Tan, Iron stained Gila Cg. Tr. Cu. Med. hard $210$ $215$ $5$ <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td> <td></td>			1				1	
608020"""8010020Recent Aluvium"""10012020""""12014020""""1401455Recent Aluvium"""1401455Recent Aluvium"""1501555""""1601655Recent Aluv. to 162.0. Contact Tan, Iron stained Gila Cg. """1601655Recent Aluv. to 162.0. Contact Tan, Iron stained Gila Cg. """1701755Tan, Iron stained Gila Cg. Tr. Cu. Hard""1701755Tan, Iron stained Gila Cg. Tr. Cu. Hard""1801855Tan, Iron stained Gila Cg. Granitic appearance. Soft""1851905Soft, Tan, Iron Stained Gila Cg. Even grained, fine in size. Tr. Cu""1952005Tan, Iron stained Gila Cg. Tr. Cu. Med. hd.""1952005Tan, Iron stained Gila Cg. Tr. Cu. Med. hard2002055Tan, Iron stained Gila Cg. Tr. Cu. Med. hard2102155Tan, Iron stained Gila Cg. Tr. Cu. Med. hard2102155Tan, Iron stained Gila Cg. Tr. Cu. Med. hard2112205Tan, Iron stained Gila Cg. Tr. Cu. Med. hard </td <td></td> <td></td> <td>1</td> <td>II II II</td> <td></td> <td></td> <td>L</td> <td></td>			1	II II II			L	
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2152205Tan, Gray, Iron stained Gila Cg. Fair Cu. Med. hard.552202255Gray, Iron stained, highly silicified Gila Cg. Hd. Good Cu.612252305Gray, Iron stained, highly silicified Gila Cg. hd. Good Cu.702302355Gray, Black, Iron stained Gila Cg. Highly silicified. Hd672352405Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.672402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68	210	215		Tan, Iron stained Gila Cg. Tr. Cu. Med. hard			-	
2202255Gray, Iron stained, highly silicified Gila Cg. Hd. Good Cu.612252305Gray, Iron stained, highly silicified Gila Cg. hd. Good Cu.612302355Gray, Black, Iron stained Gila Cg. Highly silicified. Hd672352405Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.672402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68	215	220		Tan, Gray, Iron stained Gila Co. Fair Cu. Med. hard				
225       230       5       Gray, Iron stained, highly silicified Gila Cg. hd. Good Cu       .70         230       235       5       Gray, Black, Iron stained Gila Cg. Highly silicified. Hd.       .67         235       240       5       Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd       .67         240       245       5       Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd       .54         245       250       5       Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd       .68	220	225		Gray, Iron stained, highly silicified Gila Cg. Hd. Good Cy				· .
2302355Gray, Black, Iron stained Gila Cg. Highly silicified. Hd. Good Cu. Changed bit.672352405Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.672402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68	225		5	Gray, Iron stained, highly silicified Gila Cg. hd. Good Ch		1 ·		
Good Cu. Changed bit.672352405Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.672402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68	230			Gray, Black, Iron stained Gila Cg. Highly silicified Ha			10	
2352405Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.672402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68				Good Cu. Changed bit			67	
2402455Gray, Iron stained, highly silicified Gila Cg. Fair Cu. Hd.542452505Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd.68	235	240	5					
245 250 5 Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd .68	240		5	Grav. Iron stained, highly silicified Gila Co. Fair Cu. Hu				
	245		5.	Gray, Iron stained, highly silicified Gila Cg. Good Cy. Hd				
(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	250	255		Gray, """ " " " Cg. Good Cu. Hd			.85	
Soft, altered seam is at 250-254							,	
255 260 5 Gray, Iron stained, highly silicified Gila Cg. Good Cu. Hd91	255	260	5		•		. 97	
Broke bit at start of run to 265. Pulled rods, 2 cones missing				Broke bit at start of run to 265. Pulled rods, 2 cones m	issing		-	
from bit. Tried to fish pieces with magnet. Unsuccessful. Made 2 baskets,				from bit. Tried to fish pieces with magnet. Unsuccessful	. Made	2 hed	keta	
& tried to pick up remnants of bit. Unsuccessful, basket twisted off mode				& tried to pick up remnants of bit. Unsuccessful, basket	twist	ed off	rode	
& tried to pick up remnants of bit. Unsuccessful, basket twisted off rods. Abandoned hole. Good ore in bottom hole. Water in hole.		1		Abanaonea noie. Good ore in bottom hole. Water in hole.			TOUP	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,935N 49,462E
Type of Drill: WD DD RD X CD	Inclination:	<b>x</b>
Hole No.: EP #65 (Sheet 1 of 2)	Collar Elev:	171.0
Date Drilled: 4/21/66 Started 7:30 AM Completed 3:30 PM	Logged By:	H.W. Horst

ţ

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
0.0	20.0	20.0	Recent Aluvium. Set casing to 3.0'				1
20.0		20:0			[	tr.	
40.0		20.0				tr.	
60.0		20.0				tr.	
80.0		20.0			[	tr.	- A
100.0		20.0				tr.	
120.0	140.0					tr.	·.
140.0	145.0				Į .	tr.	
		1.0	" " to 141.0' Contact of Tan Gila Cg. Much Qts.	Hard	·.	tr.	× +
145.0	150.0	5.0	Trace Cu. Pulled & changed bit at 143. Cone broken				
150.0	155.0		Tan, gray Gila Cg. Highly silicified. Much Qts. Hard. Tr.	Cu	1 · .	tr.	
155.0	160.0		Gray, Iron stained, highly silicified Gila Cg. Hard. Tr. Gray, Gila Cg. to 159.0'. Soft, fine even grained, Gila C	fu :	r.	tr.	
			Granitic in enperance Mr. (1) Dulled bit	B•			
1.			Granitic in appearance. Tr. Cu. Pulled bit. very worn, on new bit.	put		tr.	
160.0	165.0	5.0		1.	l str	Υ.	
			Alternation Hd., soft Gila Cg. Some fine, even grained, o	ther	1999 1997		
			streaks hd. & silicified. Very fractured ground. Poor circulation. Water used to maintain returns. No Cu vis				
165.0	170.0	5.0	Same material as above. Poor circulation. Hard to get ret	LDIE.		tr.	·
			Using water to seal sides	urns.		ia .	,
170.0	175.0	5.0	Same material as above. Circulation problems. Using water			tr.	4
•	-1200		any returns. Ground hgihly fractured & broken	IOT		9	
175.0	180.0	5.0	Same as above.	·		tr.	;
180.0	185.0		No sample, returns shut off. Unable to maintain circulation	L		tr.	
185.0	190.0	5.0	No sample. No circulation	r a		-45	
190.0	195.0		Circulation returned with use of water. Samples hadly meet	ed		a	in di
			No Cu visible. Hard. Highly quartzitec material. Grav			tr.	
1. <b>95.0</b>	200.0	5.0	Circulation maintained with water. No Cu visible. Grav.	1		011	
			highly silicified & hard material. Pulled rods & change	a bit.			ý.
<b>000 0</b>			Bit worn.			tr.	
200.0	205.0	5.0	Gray, highly silicified material. Much Qts. in cuttings bu	t soft			
			No Cu Visible. Gila Cg.			tr.	
	210.0		Gray, Highly quartzitic material but soft. No Cu visible	)		tr.	
	215.0	2.0	Same as above	)	0.00	tr.	
	220.0	-	Gray, quartztitic material soft. No Cu visible			tr.	
	225.0 230.0	5.0 5.0	Gray, quartztic material. Soft. No Cu visible. Sample Dry	) GILA	Cg.	tr.	
	235.0			)	аран. С	tr.	
	240.0	5.0	Wet sample. Needed water for returns. Quartztic material	2	Ð	.15	
	F	2.0		)	18.4	.14	

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates:
Type of Drill: WD DD RD CD	Inclination:
Hole No.: EP #65 (Sheet 2 of 2)	Collar Elev:
Date Drilled: 4/21/66	Logged By: HWH

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
240.0 250.0	250.0 260.0	10.0 10.0	No sample. Gila Cg. Composite sample. Returns, Dry sample. Black to Gray Gila Cg. Tr. Cu visible. Change at x 260.0	·		•33 •33	
260.0	270.0	10.0	Altered, brown, Iron stained Granite. Wet sample. Soft.			• 33	
270.0	280.0	10.0	Water in hole Altered brown, Iron stained Granite. Hole dried up and			.30	
-			sample taken dry.			.24	e
					· • ·	e e	
					- The second		
				e At			
				- 4 :			
4							
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#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isle	Coordinates:	50,815 N 49,258 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #66 (Sheet 1 of 2)	Collar Elev:	160.0
Date Drilled: 4/22/66 Started 4:30 PM 4/22/66 Completed 1:30 PM	Logged By:	H.W. Horst

	1	FT.			ASS	AY	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			•••	
0.0	20.0	20.0	Recent Aluvium. Set casing to 3'			tr.	
20.0		20.0			÷	tr.	
40.0		20.0				tr.	
60.0		20.0	11 If the second s			tr.	
80.0		20.0	tt tt			tr.	
100.0	1	20.0				tr.	
120.0	140.0					tr.	
140.0	145.0	1	11 11			tr.	
145.0	150.0		II	-		tr.	
150.0	155.0		H H			tr.	1
155.0	160.0		и и 	1		tr.	
160.0	165.0		Recent Aluvium. Pulled rods & changed bit			tr.	
165.0	170.0		n n			tr.	
170.0	175.0	5.0				tr.	1
175.0	180.0	5.0	tt tr			tr.	· · · ·
180.0	185.0	5.0	11 11			tr.	
185.0	190.0				t i	tr.	
190.0	195.0					tr.	
195.0	200.0		17 11	·		tr.	•.
200.0	215.0	15.0	" " to 212.0. Contact tan Gila Cg. Tr. Cu. No sam				
		<b>1</b> · !	Return to 211.0. Sample returns blown to 215.0' were ver				
·			fine & probably represent 11 ft. drilled with no return.	So			
			sampled & labeled wit into composite sample.	1		.13	
215.0	220.0	5.0	Poor sample. Probably salted from loose sand above when no				الأولى
			returns were recovered. Section here drilled very hard &			1	
			no representative cuttings obtained. Pulled rods & chang	ea			1 S.,
000 0			bit. Bit worn.	1		tr. .42	
220.0	225.0		Tan to gray Gila Cg. Highly silicified. Hard. Fair Cu		114		
225.0	230.0		Gray to black, highly silicified. Iron stained Gila Cg. Fai		Hd.	•53 •34	
230.0	235.0		Gray, highly silicified, Iron stained Gila Cg. Hard. Tr. Cu Gray, tan, highly silicified. Iron stained Gila Cg. Hd. Tr.				
235.0	240.0		Tan, Iron stained, highly silicified Gila Cg. Hd. Good Cu	ou		·37 .81	
240.0	245.0		Pulled rods & changed kex bit at 243.0. Hole wet. Reduced	1			
245.0	250.0	5.0				.48	
			sample return. Tan, Gila Cg. Hard. Fair Cu	6.0		•+•	
250.0	255.0	5.0	Alternating hard & soft streaks of Gila Cg. Tan, Iron stain Fair Cu	ieu		.68	
		•	Part ou				
6 Y - 1 - 4				1 S			
		1 /		1914 <b> </b>			1

Property:

# EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

HWH

Property:	Emerald Is	Le			Coordinates:
j of Drill	1: WD	DD R		D	Inclination:
Hole No.:	EP # 66	(Sheet 2	of 2)		Collar Elev:
Date Drilled	: 4/22/66				Logged By:

Emerald Isle

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
255.0	260.0	5.0	Alternating hd. & soft streaks of Tan, Iron stained Gila				
260.0	265.0	50	Cg. Tr. Cu Gray, altered Gila Cg. Granitic in appearance. Iron staine	a		•49	
200.0	20).0		medium hard. Tr. Cu	ю. 		.36	
265.0	270.0	5.0	Gray, altered Gila Cg. Granitic appearance. Iron stained				
			medium hard. Tr. Cu			.44	
270.0	275.0	5.0					
	-		Kaolonite. Strong Iron staining. Soft.			•31	
275.0		5.0				•33	
280.0	300.0	20.0	Brown to tan, altered Granite. Iron stained. No returns 28	0			
			295.0. Hole wet. Used water injection to regain circula				
		•	& get cuttings return.	1		•55	
		ļ					

## EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates: 50,754 N 49,764 E
Type of Drill: WD DD RD _X CD	Inclination:
Hole No.: EP #67	Collar Elev: 182.0
Date Drilled: 4/22/66 Started 3:30 PM	Logged By: H.C. Lewis

Completed 7:00 PM

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	АУ	
FROM 0 20 40 60 80 100 125 130 135 140 145 150 155 160	TO 20 40 60 80 100 120 125 130 135 140 145 150 155 160 165		DESCRIPTION OF MATERIAL AND REMARKS Recent aluvium. Set casing to 3' """"""""""""""""""""""""""""""""""""		ASS	AY tr. tr. tr. tr. tr. tr. tr. tr.	
165 170 175 180 195 205 210 225 235 245 245	170 175 180 185 190 205 210 205 210 215 220 235 240 245 250	5555555 <b>5</b> 5	""""""""""""""""""""""""""""""""""""""	250'		• 24 • 24 • 26 • 26 • 26 • 26 • 26 • 26 • 26 • 26	

# EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,640 N 49,760 E
Type of Drill: WD DD RD X CD	Inclination:	
Hole No.: EP #68	Collar Elev:	176.0
Date Drilled: 4/26/66 Started 8:15 AM	Logged By:	H.C. Lewis

Started 8:15 AM Completed 11:30 AM

20

-							-
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY :	
0	20	20	Recent Aluvium. Set casing to 3'	×		tr.	
20	40	20				tr.	
40	60	20			1 No	tr.	
60	80	20		1		tr.	
80	100	20	11 11			tr.	
100	120	20	" " Large boulder at 115'. Changed bit		1. 18	.27	
120	130	10				.27	
130	135	5	narder		· ·	.30	
135	140	5	More consolitated. Some rea cuttings.			.41	
140	145	5	Harder ground. Believe Gila Cg. contact at 144'. MnOz			.42	
145	150	5	Gila Cg. No Cu visible. Some epidote		1.1	.42	
150	155	5	II II II II II II Boulder	1.1		.18	
1.55	160	5				.22	
160	165	5	Gila Cg. No Cu seen. Dark color in cuttings.			•35	
165	170	5	" "No Cu "		1.00	•34	
170	175	5			1	.48	
175 180	180	5		<b>.</b>	· ·	.46	
	185	55	white quartz coating- chalcedony (1)	1		•53	
185	190	2	Gila Cg. No Cu seen.			.61	
190	195	5	Gila Cg. No Cu seen	1992		.61	
195	200	5	Gila Cg. No Cu seen. Good dark color in cuttings			.62	
200	205	5	Gila Cg. No Cu seen. Gila not well cemented			.61	
205	210	5	Gila Cg. No Cu seen. Boulder		S.	.31	
210	215	5	Gila Cg. No Cu seen.			.49	
21 <b>5</b>	220	5	Gila Cg. No Cu seen			.46	
220	225	5	Gila Cg. No Cu seen		- 14	•39	
225	230	5	Gila Cg. No Cu seen			•35	
230 -	235	5	Gila Cg. No Cu seen. Hit white clay seam at 233.			.27	
235	240	5	Gila Cg. No 6u seen. Contact at 238'			.28	
240	245	5	Altered granite. Considerable quartz. Cuttings moist	÷		.19 .20	
245	250	5			1.1.1	.20	
	1	· · ·	<b>T.D. 250</b>	5. 1	1		

#### EL PASO NATURAL GAS COMPANY. MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Is	lle	Coordinates:	49,758 E
Type of Drill: WD	DD RD _X CD	Inclination;	
Hole No.: EP #69		Collar Elev:	210.0
Date Drilled: 4/26/66	Started 1:00 PM	Logged By:	H.C Lewis

Completed 6:15 PM

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS		ASS	AY	
0 20	20 40	20 20	Recent aluvium. Set casing to 3'	.•		tr. tr.	
40	60	20	11 11			tr.	
60	80	20	11 11			tr.	
80	100	20	11 11			tr.	
100	120	20	11 15			tr.	
120	140	20	ti ti ti di seconda di		1	tr.	
140	160	20	" " Changed bit at 160.'			tr.	
160	170	10	Poor cuttings, return. Near Gila contact, in fine sand			tr.	
170	180	101	Gila Cg., contact at about 175.'			tr.	
180	185	5	" " Tan, iron-stained, much Qtz.			tr.	
185	190	5	Gila Cg.			tr.	
190 195	195 200	5 5 5 5	Gila Cg.		·	tr.	
195	200	5	Gila Cg.		ł	tr.	
200 205	205	.5	Gila Cg.			tr.	
205	210 215	555555	Gila Cg.	. •		118	
215	220		Gila Cg.		1. A.	.14	• .
220	225	2	Hit granite at 218 feet. Gray color. Tr. Gu Granite. Harder ground			.28	
225	230	2	Granite. Hard drilling			•33	
230	235		" " " . Well consolidated. Tr. Cu		T.	.22	
235	240	5	Very hard drilling. Changed bit. Appears to be fresh Gran	1+		.20	
		-	or large granite boulder. Could not drill with new bit.	τυe			
all and a second se			Pulled out of hole. T.D. 240			1 .11	
4 · ·			(Possibly no Gila, but went into alt. granite at 218!				•
			from aluvium.)				
f.	1				1	1	

# EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,937 N 49,665 E	
Type of Drill: WD DD RD X CD	Inclination;		
Hole No.: EP #70	Collar Elev:	280.0	
	•		

Date Drilled: 4/27/66 Started 8:30 AM Completed 5:15 PM

Logged By: H.W. Horst

FROM TO		TO DRILL DESCRIPTION OF MATERIAL AND REMARKS		ASSAY			
	20	20	Resent Aluvium. Set Casing to 3'		tr.		
ΞU	40	20		1	tr.		
40	60	20		-	tr.	•	
60	80	20	tt i tt	1.1	tr.	• • •	
80	100	20	11 11		tr.		
100	120	20	17 17 1		tr.		
120	140	20	11 ff		tr.		
140	160	20	17 11 ·····		tr.		
160	180	20	Difficulty with circulation. Composite sample made. Cu			•	
			observed at 176.0. Tan Gila Cg. at 174.0. Soft		tr.		
180	185	5	Tan, soft, Irnn stained Gila Cg. Tr. Cu	1.1	tr.		
185	190	5	Tan, Soft. Iron stained Gila Cg. Tr. Cu		.13		
190	195	5	Tan, gray, Iron stained Gila Cg. Tr. Cu. Med. hard.		.tr		
195	200	5	Tan, gray, Iron stained Gila Cg. Tr. Cu. Hard		.11		
200	205	5	Tan, gray Gila Cg. alternating Soft & hard streaks. Tr. Cu		.13		
205	210	5	Tan, gray Gila Cg. alternating soft & hard streaks. Tr. Cu	1997	.21		
210	215	5	Tan, gray, Gila Cg. Tr. Cu. Contact altered green to gray		• • • • •		
	-		gnessic granite at 214.0. Soft at contact				
215	220	.5	Gray gnessic granite. Qtz. increasing & gettin harder at		⇒33	· ·	
			220.0 Much fine material, altered brown, granitic in appeara		.41		
220	225	5	Gray gnessic granite. Qtz. stringers. Very hd. Fine material.				
			Brown, altered granite	1.1	.25	`da`	
225.	230	5	Gray, gnessic granite. Very hard. Fine material brown, altered				
-			granite.		, tr.		

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isl	e	Coordinates:	50,694 N 49,466 E
Type of Drill: WD	DD RD <u>X</u> CD	Inclination:	
Hole No.: EP #71		Collar Elev:	180.0
Date Drilled: 4/28/66	Started 9:00 AM Completed 4:00 PM	Logged By:	H.W. Horst

FT.						
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	A92	WT.	
0	20	20	Recent Aluvium. Set 3' Casing		tr.	
20	40	20			tr.	
40	60	20			tr.	
60	80	20			tr.	
80	100	20	Recent Aluvium		tr.	
100	120	20	The second se		tr.	
120	140	20			tr.	
140	160		Recent Aluvium		tr.	
160	165	5		·	tr.	•
165	170	5			tr.	
170	175	1 .	Recent Aluvium		tr.	
175	180	5	Contact of Tan, Gila Cg. Med. hd. No Cu visible (Consolidation	ted Aluv.?)	tr.	-
180	185		Tan, Gila Cg. Iron stained. No Cu visible "		tr.	
185	190	5	Tan to gray Gila Cg. Iron stained. Tr. Cu	11	tr.	
190	195	5	Tan to gray Gila Cg. Hard. Iron stained Tr. Cu. "	11	tr.	
1.95 200	200 205		Tan, Iron stained Gila Cg. Soft. Tr. Cu "	ane 11 a Al III	tr.	
205	210	5	Tan, TION BUALLER GILA Og. Med. Hu. II. U		.15	
210	215	5	run, rion standed dira og. Med. Hald. II. Ou		.13	
215	220	5 5	Long aron promined office officer it. Of		.14	
<b>320</b>	225		Tan, Iron stained Gila Cg. Med. Hd. Tr. Cu (Contact 218.0?) Gray, black Gila Cg. Hard. Fair Cu	)	.19	
225	230		Black, gray Gila Cg. Hd. Iron stained. Fair Cu		.69	
230	235		Brown, black Gila Cg. Hd. Iron stained. Fair Cu	,	.76	
⊴35	240		Black, Iron stained Gila Cg. Hard. Tr. Cu		.34	
240	245		ray, Iron stained Gila Cg. Hard. Good Cu		1.59	
45	250		Fray, Iron stained Gila Cg. Hard. Good Cu		1.80	
250	255	¥ 1	Gray, tan, Iron stained Gila Cg. Hard. Good Cu		1 1	
255	260		Gray, tan, Iron stained Gila Cg. Hard. Good Cu in Gila port	ton	•75	
			Hard Granite boulder 216-218. No Cu show in this footage		1.00	
260	265	5	Brown, highly Iron stained Gila Cg. Hd. Good Cu			
265	270		Brown, highly Iron stained Gila Cg. Softer. Fair Cu		1.34	
270	275		Tan, somewhat altered, Iron stained Gila Cg. Soft. Fair Cu		·54	
		-	Circulation problems developing. Reduced volume of retur	ma	• (4	
			Adding water to soft cutting & seal fracture.	ЩО		
275	280	5	Tan, altered Gila Cg. Fair Cu. Soft. Had to go to water to			
			maintain circulation at 280.0. This sample dry.		51	
280	290	10	Brown, highly Iron stained. Altered granite. Soft	1941 - E	•34	
<b>≥90</b>	300	10	Brown, highly Iron stained. Altered Granite. Soft		.43	
					J	
<i>v</i>						••
⇒ sécesais+reation I	and the second	l		4		

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates: 50,760 N 49,563 E
Type of Drill: WD DD RD X CD	Inclination:
Hole No.: EP #72	Collar Elev: 186.0
Date Drilled: 4/28/66 Started 5:00 PM	Logged By: H.W. Horst

4/29/66 Completed 12:00 Noon

	1	FT.		· ASS	AY	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			ti. I
0	20	20	Recent Aluvium. Set 3' Casing		tr.	
20	40	20			tr.	• 
40	60	20	11 - 11 - 11 - 11 - 11 - 11 - 11 - 11		tr.	x.
60	80	20			tr.	
80	100	20	Recent Aluvium		tr.	
100	120	20	11 11 11 11 11 11 11 11 11 11 11 11 11	ļ	tr.	
120	140	20			tr.	
140	160	20			tr.	
160	180	20	Recent Aluvium	· ·	tr.	
180	185	5	Recent Aluvium. Somewhat consolidated, pressure feeding		tr.	
185	190	5		ļ	tr.	
190	195	5			tr.	_
195	200	5		· .	tr.	
200	205	5	Recent Aluvium. Poor Circ., somewhat consol. pressure feeding		tr.	
205	210	5			tr.	,
210	215	5	Contact of tan, Gila Cg., Iron stained at 213.0', Ar. Cu			
01 -	000	_	showing. Poor circulation & sample. Water for returns		•39	
215	220	5	Tan, Irnn stained Gila Cg. Fair Cu. Circulation problems. Poor a	ample	.42	
220	225	5	Brown, heavily Iron stained Gila Cg. Dry sample. Good Cirqu.	1.1		
007			Tr. Cu. Damp ground	1. S.	•39	
225	230	5	Brown, heavily Iron stained Gila Cg. Soft. Tr. Cu. Good Circu. Damp ground		.30	
230	235	5	Brown, heavily Iron stained Gila Cg. Soft. Good Cu. Damp ground		•93	
235	240	5	Tan, gray Gila Cg. Hard. Good Cu		1.50	
240	245	5	Tan, gray Gila Cg. Hard. Good Cu	$= \frac{1}{2} \sum_{i=1}^{n} $	1.16	
245	250	5	Gray, black, Iron stained Gila Cg. Hard. Good Cu	1 · .	1.19	
250	255	5	Tan, altered appearing Gila Cg. Soft. Good Cu. Hole damp		.90	
255	260	5	Tan, altered appearing Gila Cg. Soft. Fair Cu. Hole damp		.80	
260	265	5	Fan, altered appearing Gila Cg. Hole damp. Soft. Fair Cu			
			Reduced volume of sample		.60	
265	270	5	Tan, altered appearing Gila Cg. Hole damp. Soft. Tr. Cu. Reduced			
			volume of sample		.47	
270	275	5	Brown, altered, Iron stained granite. Dry sample. Granite at 273 Soft	.01		
275	280	5	Brown, highly altered, Iron stained granite. Dry sample. Soft		.49	
280	290		Brown, altered, Iron stained granite. Dry sample. Soft Brown, altered, Iron stained granite. Dry sample. Soft. Reduced		.48	
	1-10		volume of sample. Would have to add water to get returns.		Í	
	· ·		Hole bottomed		). ~	7
		-			•43	1. ¹
1		1			. <del>.</del> .	

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EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isle	Coordinates:	50,603 N 49,458 E	•
Type of Drill: WD DD RD X CD	Inclination:		
Hole No.: EP #73	Collar Elev:	180.0	
Date Drilled: 4/29/66 Started 1:00 PM 4/30/66 Completed 10:00 AM	Logged By:	H.W. Horst	

	1	I FT.		· ASS	AY	
FROM	то	DRILL	DESCRIPTION OF MATERIAL AND REMARKS			
~	00			-		
0	20	20	Recent Aluvium. Set casing to 3'		tr.	
20	40	20			tr.	17. 19
40	60 80	20			tr.	
60 80	100	20 20			tr.	•
100	120	20	Recent Aluvium		tr.	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
120	140	20		2	tr.	1. Sec.
140	160	20	" " Changed bit at 130.0'		tr.	
160	180	20	11 11	** · · ·	tr.	
180	200	20	Recent Aluvium. Somewhat consolidated		tr. tr.	
200	205	5	" " Consolidated		tr.	
205	210	5			tr.	
210	215	5	и и		tr.	
215	220	5	Tan, Iron stained Gila Cg. in at 216.0. Tr. Cu. Contact		tr.	
220	225	5	Tan, even grained, heavily Iron stained Gila Cg. Tr. Cu. Soft	Î	.27	
225	230	5	Brown, heavily Iron stained Gila Cg. Soft. Tr. Cu.		.26	
230	235	5	Tan, Iron stained, slightly altered Gila Cg. Med. hd. Tr. Cu		.17	
235	240	5	Tan, Iron stained, slightly altered Gila Cg. Med. hd. Tr. Cu		.17	2.1
240	245	-5	Brown, Iron stained, altered appearing Gila Cg. Soft. Tr. Cu		• - 1	,
c.m. T.V			Leached appearance		.18	2
245	250	5	Same as above		.10	
250	255	5	Brown, Iron stained, altered Gila Cg. Leached appearance. Soft	mia	.20	
2,0	2))		Cu	· Tr.	.40	
255	260	5	Brown, soft Gila Cg. to 257.0. Soft. Harder Gila to 260.0. Tr.		.40	
-))	200		Fair Cu at 258 when hard	yu	.64	
260	265	-				
200	205	5	Tan, Iron stained Gila Cg. Hd. streak 260-262. Very Good Cu. S	ort.	.67	
065	070		Leached 262-265. Fair Cu for 5' section		60	· · · ·
265	270	5	Brown, black Gila Cg. leached & altered. Soft. Tr. Cu		.60	
270	275	5	Brown, Soft Gila to 272.0'. Hard granite boulder 272-275.0'	- N	.30	
275	280	5	Brown, altered, Iron stained granite in at 276. Contact bit			
			plugged at 280. Bit pulled and iron stained, granitewedged			
•			in all crevices. Hole bottomed		.30	•
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# EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

Property: Emerald Isle	Coordinates:	50,871 N 49,599 E
Type of Drill: WD DD RD CD	Inclination:	
Hole No.: EP #74	Collar Elev:	186.0
Date Drilled: 4/30/66 Started 12:30 PM 4/30/66 Completed 4:00 PM	Logged By:	H.W. Horst

		FT.	· ASS	AY
FROM	ТО	DRILL	DESCRIPTION OF MATERIAL AND REMARKS	
0	20	20	Recent Aluvium. Set casing to 3'	tr.
20	40	20		tr.
40	60	20		tr.
60	80	20	17 11 (A. 1997)	tr.
80	100	20	Recent Aluvium	tr.
100	120	20	11 11	tr.
120	140	20	H H	tr.
140	160	20		tr.
160	170	10	Recent Aluvium	tr.
170	175	5	11 11	tr.
175	180	5	Contact of tan, hard, Iron stained Gila Cg. at 176'. Tr. Cu	tr.
180	185	5	Brown, heavily Iron stained Gila Cg. Med. hd. Tr. Cu	tr.
185	190	5	Tan, Iron stained Gila Cg. Hard. Tr. Cu	tr.
190	195	5	Gray, highly silicified, Iron stained Gila Cg. Tr. Cu. Hard	tr.
195	200	5 5	Gray, highly Iron stained Gila Cg. Tr. Cu. Hard	tr.
200	205	5	Black, gray, highly silicified Gila Cg. Tr. Cu. Med. hard	.56
205	210	5	Tan, gray, highly silicified, Iron stained Gila Cg. Hd. Tr. Cu	.32
210	215	5	Tan, gray, highly silicified, Iron stained Gila Cg. Very hd. Tr. Cu	.43
215	220	5	Tan, gray, highly silicified, Iron stained Gila Cg. Hard Tr. Gu	.27
220	225	5	Tan, gray, highly silicified, Iron stained Gila Cg. Hd. Tr. Cu	.20
225	230	5	Tan, slilcified Gila Cg. to 228.0. Contact of tan, altered Iron	4. în
			stained granite. Soft	.20
230	235	5	Tan, Iron stained, altered granite. Soft. Kaolonite, Mica	.13
235'	240	5	Tan, Iron stained, altered granite. Soft. Kaolonite	.13

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,436 N 49,451 E
Type of Drill: WD DD RD X CD	Inclination:	49,471 <u>1</u> 5
Hole No.: EP #75	Collar Elev:	159.0
Date Drilled: 5/1/66 Started 8:00 AM	Logged By:	H.W. Horst

Completed 3:00 PM

5. 		· · · · · · · · · · · · · · · · · · ·						
то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY					
1	<u> </u>		1					
20	20	Recent Aluvium. Set casing to 3'		tr.				
	20	11 II	4.4	tr.				
60	20	11 11 · · · ·	14	tr.				
80	20	11 H		tr.				
<u> 100</u>	20	lf tf		tr.				
	20	Recent Aluvium		tr.				
	20			tr.				
	20	· · ·	• *	tr.				
180	20	10 EE						
190	10	Recent Aluvium. to 189.0. Contact of Tan, Iron stained						
200	10		- 196 10	-				
210	10	Tan, Brown, Iron stained Gila Cg. Alternating soft to hard		.20				
				.25				
220	10	Tan, brown, Iron stained Gila Cg. Altered Granitic appearance		-				
000	1.0	No Cu visible. Leached characteristics		.14				
230	10	Brown, black, altered, leached appearing Gila Cg. Soft. No Cu		70				
240	10			.10				
		altered. Brown Granite.		22				
250	10			• 22				
		Soft. Leached appearance. Kaolonitic Mica		10				
260	10	Same as above						
280	20	Brown altered Iron stained Granite. Soft. Leached appearance.	22					
		Hole getting damp at 280'. Still good dry returns		.10				
300	20	Brown, altered, Iron stained Granite. Kaolonite & Mica. Dry						
		returns to 293. Pressure building up. Had to use water						
		injection to return cuttings and maintain circulation.						
		Hole bottomed.		.14				
				,				
	20 40 60 80 100 120 140 160 180 190 210 220 230 210 230 240 250 250 260 280	TO       DRILL         20       20         40       20         60       20         80       20         100       20         120       20         140       20         140       20         160       20         180       20         190       10         210       10         230       10         240       10         250       10         260       10         280       20	TO       DRILL       DESCRIPTION OF MATERIAL AND REMARKS         20       20       Recent Aluvium. Set casing to 3'         40       20       " "         60       20       " "         60       20       " "         80       20       " "         100       20       " "         100       20       " "         120       20       Recent Aluvium         140       20       " "         120       20       Recent Aluvium         140       20       " "         120       20       Recent Aluvium. to 189.0. Contact of Tan, Iron stained Gila Cg.         140       20       " "         150       10       Tan, Iron stained Gila Cg. Cu visible         200       10       Tan, Brown, Iron stained Gila Cg. Altered Granitic appearance         10       No Cu visible       Leached characteristics         230       10       Brown, black, altered Gila Cg. to 238.0. Contact of Leached         240       10       Brown, Iron stained altered Granite. Some Gnessic in texture         250       10       Brown, Iron stained Granite. Some Gnessic in texture         260       10       Same as above       Soft. Leached appearance.	TO       DRILL       DESCRIPTION OF MATERIAL AND REMARKS         20       20       Recent Aluvium. Set casing to 3'         40       20       " "         60       20       " "         60       20       " "         80       20       " "         100       20       " "         101       20       " "         102       20       Recent Aluvium         140       20       " "         120       20       Recent Aluvium         140       20       " "         140       20       " "         140       20       " "         140       20       " "         140       20       " "         140       20       " "         150       20       " "         160       20       " "         180       20       " "         180       20       " "         180       20       " "         180       20       " "         190       Recent Aluvium. to 189.0. Contact of Tan, Iron stained Gila Cg. Altered Granitic appearance No Cu visible         220       10       Tan, Brown, Ir	TODRILLDESCRIPTION OF MATERIAL AND REMARKS2020Recent Aluvium. Set casing to 3'tr.4020""4020""6020""8020""10020""10020""12020Recent Aluvium14020""14020""16020""17010Recent Aluvium. to 189.0. Contact of Tan, Iron stained Gila Cg1218020""19010Recent Aluvium. to 189.0. Contact of Tan, Iron stained Gila Cg1220010Tan, Iron stained Gila Cg. Cu visible.1220110Tan, Iron stained Gila Cg. Alternating soft to hard No Cu visible.2520210Tan, brown, Iron stained Gila Cg. Altered Granitic appearance No Cu visible. Leached appearing Gila Cg. Soft. No Cu visible.1421010Brown, black, altered Gila Cg. to 238.0. Contact of Leached altered, Brown Granite3325010Brown, Iron stained altered Granite. Soft. Leached appearance. Hole getting damp at 280'. Still good dry returns Brown, altered, Iron stained Granite. Kaolonite & Mica. Dry returns to 293. Pressure building up. Had to use water injection to return cuttings and maintain circulation19			

EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

#### DRILL HOLE LOG

Property: Emerald Isle	Coordinates:	50,287 N 49,876 E
Type of Drill: WD DD RD X CD	Inclination:	1
Hole No.: EP #76	Collar Elev:	173.0
Date Drilled: 5/1/66 Started 4:00 PM	Logged By:	H.W. Horst

5/2/66 Completed 1:00 PM

	1	FT.			ASS	AY	
FROM	TO	DRILL	DESCRIPTION OF MATERIAL AND REMARKS				
0	20	20	Set casing to 3'. Recent aluvium			tr.	
20	40	20	Recent Aluvium			tr.	
40	60	20	11 H			tr.	
60	80	20	1f 1f	(	1.U	.29	
80	100	20	11 H	[ ·		.30	
100	120	20	Recent Aluvium			.13	
120	140	20	Recent Aluvium to 137.0. Tan, strongly altered & Leached. Black Gila Cg. in at 137.0 Cu show visible		- 2 S -	.24	
140	150	10	Tan, to Gray, soft, Altered Gila Cg. Cu visible. Leached appearance			.28	
150	160	10	Gray to Black, Soft, altered Gila Cg. Cu vimible. Leached appearance			.36	•
160	170	10	Gray, Hard, Gila Cg. No Cu visible			.31	
170	180	10	Tan, Gray, Iron stained Gila Cg. Soft. No Cu visible. Lead	hed		•34	
180	190	10	appearance	P+		.32	
190	200	10	Brown, altered, heavily Iron stained Granite in at 181. So Brown, highly Altered, Iron stained Granite. Soft			.21	
200	220	20	Brown, highly altered, Iron stained Granite. Soft. Hole ge	++170		.21	
			damp. Still blowing good dry sample			.26	
220	240	20	Brown, highly Altered, Iron stained Granite. Soft. Kaolon: Mica. Hole damp but good dry sample. Volume	te,	- 14 19	.44	
240	260	20	Brown, Highly altered, Iron stained Granite. Soft. Kaolon:	te,			
			Mica. Drilled with no pull down pressure. Able to keep h and good returns to 254. Pressure building in hole from		<b>У</b> 2	•59	
			packing at 254. Had to use water injection to keep cutt:		б.		ini A
			returning and free rods and bit. Hole bottomed.				
					10 S. 11		

 $x_1,\cdots,x_{n-1}^{n-1}$ 

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

	Type ( Hole I	of Dri: No.: H	Emerald Isle       Coordinat         L1: WD DD RD _x CD Inclination       Inclination         P #77       Collar El         1: 5/2/66 Started 2:00 PM Logged By       5/3/66 Completed 3:30 PM	50, Lon: Lev: 196	228 N 276 E 5.0 7. Hors	t	· .	
FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS			· Ass	AY	
0 20 40	20 40 60	20 20 20	Set Casing to 3'. Recent Aluvium Recent Aluvium """				.05 .09 .16	
60 80	80 100	20 20	" " Recent Aluvium to 85.0 Recent Consolidated Aluv Iron stained Granite 85 to 100'	ium or Tan	,	94 	•25 .26	
100	120	20	Green, gray, Gnessic granite in at 105.' Munh M cuttings at 115-117. Tan, granitic material	ica in		`	.21	
120	140	20	Tan to Brown Granite with much Qtz. Alternating Soft, very altered Gnessic Granite. Green to	streaks o Brown, hea	f Vily	•		•
140	160	20	Iron stained. Good returns. Dry sample Tan to Brown altered Granite with Soft streaks green Gnessic Granite to 150'. In at 150' Blue	of very al e, gray, G	tered nessic		.27	`
160	180	20	Granite. Hard. Good returns. Dry hole. Blue, gray, Gnessic Granite. Fresh appearance. I Soft, altered, damp streak for 1 foot. Return	Hard at 16 s shut off	5.	r.	.04	
180	200	20	Good returns, Dry sample again.at 166 to 180. Blue, gray, gnessic Granite. Fresh appearance. I pump troubles at 196. Shut down 1-1/2 hrs. fo Hole blew water immediately after starting up	Hard. Fuel r repairs.			.03	* * *
			hole dry and gained circulation (dry again). 1 4 - 5 gallons water/minute. Hole bottomed	Estimate o			.02	

#### EL PASO NATURAL GAS COMPANY MINING DIVISION P. O. Box 1492 El Paso, Texas

# DRILL HOLE LOG

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Property: Emerald Isle	Coordinates:	50,635 E
Type of Drill: WD DD RD X CD	Inclination:	• • •
Hole No.: EP $\#78$	Collar Elev:	205.0
Date Drilled: 5/4/66 Started 8:00 AM Completed 11:30 AM	Logged By:	H.W. Horst

FROM	то	FT. DRILL	DESCRIPTION OF MATERIAL AND REMARKS	ASSAY						
0	20	20	Recent Aluvium. Set casing to 3'		.10					
20	30	10	Black to Gray Gila Cg (?) to 35. Possibly Recent Aluvium. Cu visible at 35'. Green to black	No	.18					
30	40	10	Highly altered, greenish black Gnessic material		.11					
30 40	50	10	Green, Black Gnessic material. Highly altered. Much Mica		.06					
50	60	10	Consolidated, harder, green, black Gnessic material. High altered. Much Mica	ly	tr.					
60	80	20	Brown, heavily Iron stained Granite in at 60'. Alternating streaks of Gnessic material. Green in color. Predomenet			•				
			Brown Granite. Granite highly altered, soft drilling		.03					
80	100	20	Brown, heavily Iron stained, highly altered Granite. Some thin seams of green Gnessic material		.04					
100	120	20	Brown, Iron stained Granite. Predomenate. 105-109. Blue			i				
			Gnessic material. Narrow streaks of quartz, hard. 109-1 Very soft, highly altered Granite. Brown this section	10.						
			damp Dry sample. Good returns.		tr.					
120	140	20	Hole blowing water after change of rods. Very small amoun							
			Dried up water and blowing good sample of dry cuttings a Brown, Iron stained Granite. More Qtz. and fresher appea		e e e					
11 A.			ance.		tr.					
140	160	20	Brown, Iron stained Granite. Hole wet after changing rods							
			Blew hole dry and got good sample returns and dry cuttin		·					
1. 1			from 145-160. Bottomed hole. Cleaned up hole after dril Hole estimated at 5-7 gallons water/minute	LTUR.	nil.					
						·				
1										

A-2 1 HOLE NO .. DIRECTION. Form 33-32 (9+66) a-34 Vertical PROPERTY. INCLINATION_ 5-12-70 Emerald 1510 EL PASO NATURAL GAS COMPANY LOCATION. STARTED. LLAR COORD. N. .. DIAMOND DRILL RECORD COMPLETED. 1"= 20 '= NOTE COLLAR ELEV ._ DEPTH . JL OF. SHEET NOTES BY_ SCALE. CORE ASSAYS SLUDGE ASSAYS % LOG ROCK AND ALTERATION GEOLOGY REC. SECTION SECTION Cu Rock Bit 5 Allavium. . 042 to 220' but 5 037 attempted to 5 .032 core at 50; 90; 5 ,037 145' \$ 205! .037 5 Casing set to 220 5 ,026 30 5 037 5 ,032 ,026 5 042 5 50 Boulders & Cob-S: No Cu ,042 50 3 .074 5 58 } No Core 4 Greiss, Clayey Children Ferstein 4 Greiss, Clayey Children Ferstein 46 Sand. Some of A Little Ferstein the smaller clasts are 50 4 ,032 15 6 5 .042 ,042 5 biotite schist .026 5-BO 037 5 90 95 of Granite & Cobbles of Ho Cu 95 of Granite & co Ho Cu 98 Granite Greess. Clayey Sand. Childle Ferstain 5 .026 5 BU 026 5 ,026 65 3 ,026 5 1021 5 ,026 5 ,032 5 026 5 5 026 5 016 5 .026 ,021 5 Allavium 145 Cobbles of grantet ,021 5 4 ,032 12 5 .037 ح .026 5 ,04Z 5 1026 5 037 ,042

A.2 G.-34 DIRECTION. HOLE NO. Form 33-32 (9-66* Vertical INCLINATION_ Isle Emerald 5-12-.70 EL PASO NATURAL GAS COMPANY STARTED. ATION. DIAMOND DRILL RECORD NOTE AR COORD. N. COMPLETED COL COLLAR ELEV. DEPTH . JL SCALE 2 NOTES BY SHEET SLUDGE ASSAYS CORE ASSAYS % 00 ROCK AND ALTERATION GEOLOGY REC. SECTION SECTION Cui G Alluvium 5. ,032 130 ,026 5 ,037 5 90 ,053 5 .074 5 2.30 ,089 5 205 Allurium 206 Cobbles & DA Boulders of Granite Gneiss. No sond -208 apparently washed 1.J 65 90 2.0 ,032 5 .089 away. 35 1.5 209.5

Form 33-32 (9-66). EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD SCALE $\frac{4^{4}}{2} = 4^{4}$	-	DIRECTION INCLINATION STARTED COMPLETED DEPTH NOTES BYJL					# Z       PROPERTY									
ROCK AND ALTERATION	LOG	GEOLOGY	% REC.	SECTION	CORE	ASSA	YS		S	LUDGI	E ASS	AYS				
- Allyvium					- 64					,063						
			•						5	,089						
220 Alluvium. Clayey sand & cobbles 223 224' Rock Type Change Conglumerate. Mostly sand, pebbles & cobbles. Afew boulders. Many angular pebbles & 228, cobbles.		V pale blue soft mimeral- filling interstices probably chalcanthite - Cementing meterial is	Во	3												
- Clasts, are mostly		chalcanthite & limon- ite. Tale (?) in interstices		5	,441	· · ·										
- granite & granite - gneiss, a few of the - 231 smaller ones are	0 0		100									-				
Loosely cemented	· ( · · · · · · · · · · · · · · · · · ·		100	5	,294											
- - - 241	~ (;) ~ ; ~ ; ~ (;) ~	-	100	15												
	· · · · · · · · · ·							-			-	-				

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4-6 DIRECTION Form 33-32 (9-66) -34 Cu Vertical INATION 1sle -12mercla EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD COORD. N. LETED JL 1'=4' SCALE. SLUDGE ASSAYS CORE ASSAYS ROCK AND ALTERATION Log GEOLOGY REC. SECTION SECTION Cu ŝ 246 Conglomerate Tale, limonite & 305 sand to boulder size, some angular peobles chalcanthite (?) in interstices & cobbles. Clasts mostly granite & granite gneiss. 251 100 5 slightly beter comented 2 חסו ,z47 100 4 Granite boulder 257 Well indurated Trichrysocolla in fracts 100 5 1.340 262 100 5 Good chrysocolla dissem 267 1.450 100 5 Limonite in interstices 272 5 100 Good dissem chrysocolla .84/ 277 ,105 5 100 10

HOLE NO. Form 33-32 (9-66) DIRECTION Vertica INCLINATION 5-12-70 EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD OORD. 1"= 4' JL NOTES BY SCALE SLUDGE ASSAYS CORE ASSAYS ROCK AND ALTERATION 90 GEOLOGY REC. SECTION SECTION Good dissem Chrys= Longlomera Sand to boulder 2*8*2 ocolla. size, Some angular Much limonite in pebbles & cobbles. interstices. Clasts mostly granite 0 100 5 & granite gneiss, Looks like some of . 604 287 Not as wellthe Cu is chalcanthite remented. Clayey & sandy. More leached. Granite boulder looking. less Fe Chalcanthite but 5 100 no chrysocolla Less limonite 292 Much Tale in places ι .305 298 5 100 303 305' Rock Type Change Granite, much Biotite 6 85 Much tale in fracs. Lt brn. altered. Well fractured but most 309 fracs healed w/ ,2.26 No pyrite limonite. 5 100 314

3

A-2 HOLE NO. DIRECTION Form 33-32 (9-66)* Cn - 34 Vertical INCLINATION_ 5-12-70 EL PASO NATURAL GAS COMPANY 'ION ARTED AR COORD. . N. ..... DIAMOND DRILL RECORD OMPLETED. COL COLLAR ELEV. DEPTH SCALE _____ 4' JL 6 SHEET . _0 F__ NOTES BY_ SLUDGE ASSAYS CORE ASSAYS % 90 ROCK AND ALTERATION GEOLOGY REC. SECTION SECTION - 319' V Tale, some clay & Fe-319 stain, Core falls Core falls Granito No pyrite or Visable Cu 5 100 ,210 4 100 Foliations indistinct but generally dippin 323 about 300 326-329 V highly altered, "rotten", much 328 tale. 5 ,116 5 100 333 5 100 338 337-338 Vhighly alt- # ,110 4 100 342 3 75 3 45 , 131 100 5 35V

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A-Z HOLE NO. DIRECTION Form 33-32 (9-66). Cu-34 INCLINATION Vertical PROPERTY_ 5-12-70 CATION. EL PASO NATURAL GAS COMPANY RTED R COORD. N. DIAMOND DRILL RECORD COMPLETED AR ELEV. DEPTH JL 2 OF. SCALE 1= 4" SHEET NOTES BY____ SLUDGE ASSAYS CORE ASSAYS % LOG GEOLOGY ROCK AND ALTERATION REC. SECTION CN. SECTION 350 1 Granite Gneiss Slightly altered to V highly altered. Much 5 80 ,116 tale Broken. altered 355 * + 2 - Altered, Gougy 100 357 - Qtz vein 2 80 .068 364 Broken, altered 4 50 Broken, altered 368 3 100 371 ,105 V broken up, soft, more altered. No pyrite 5 90 more Fe-stain 376 5 65 Bark, limonite stained, Much Talc. v. soft & .095 broken up 100 5

Form 33-32 (9-66) EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD	· · · · ·	DIRECTION INCLINATION STARTED COMPLETED DEPTH			A - 2 PROPERTYA - 3 4 										
SCALE4'		NOTES BY	JL		SHEET	SHEETOF									
ROCK AND ALTERATION	LOG	GEOLOGY	% Rec.	SECTION	CORE A	SSAYS		SL	UDGE AS	SAYS					
Much Tale, Highly limonite stained	+ No +	pyrite	- 75	٤	-										
Some prange Goethite Clayey 392 Not as much Fe-stain	+ * *		-		,105										
- brn-gry. - V broken up. Much - Talc	X H		- - - 80	6											
358	A. P. S. F		-												
- szightly less broken	7		- - - - 60	6											
404 up. More Fe-stain 406	7		- 100	Z	,D68										
Core more solid less broken up. Much less 410 altered, Fc-stain		•	- 50	4											
mainly in fracs.	y Goug Brok			4											
<u>414</u> - -	+			5	,068										
419	+ + Broker		80 	2	-										

'A - 2 Form 33+32 (9-66)* DIRECTION. HOLE NO. a-34 Vertical INCLINATION_ PROPERTY. 5-12-70 TION EL PASO NATURAL GAS COMPANY RTED DIAMOND DRILL RECORD R COORD. N. COMPLETED. COLLAR ELEV. JL SCALE_1 - 4' OF SHEET NOTES BY. SLUDGE ASSAYS CORE ASSAYS 00 ROCK AND ALTERATION GEOLOGY 422 Highly altered + Mn stain in fracs_100 in places. Coarse + possibly chalcosite REC. SECTION Cu SECTION 3 .105 3 Gougy 425 426'- 428' Granite Tr pyrite in frac. -Gneiss fine-arcined 428 equigranular 3 100 Granite Gneiss, Coarse-grained, V. - + highly altered. Fe + mn - stained. Clayey + 433 Much tale No pyrite 5 50 .095 4 100 437 -Gougy 3 100 - Gousy 440 3 100 ,063 443 3 100 446 Notas altered Slightly altered Gouge z 448 Highly altered. Dk brage, some clay -185 4 Some Mn-stain 452 ,100 3 100 455

Form 33-32 (9-66).		DIRECTION				HOLE NO										
			INCLINATION Vertical				PROPERTY <u>6-34</u>									
EL.PASO NATURAL GAS COMPANY	• ••		STARTED	3-12-			LOCATION									
DIAMOND DRILL RECORD		,	COMPLETED_				COLLAR COORD. NEE									
i ji			DEPTH			OFOFOFOFOF										
SCALE 1=4	-	•	NOTES BY				, SHEETOF									
						CORE	ASSA	YS		S	UDG	E AS	SAYS			
ROCK AND ALTERATION	00		GEOLOGY		%			DRE ASSAYS								
	<u> </u>				REC.	SECTION	Gu				SECTION	Cu .				
Granite Gneiss	Ti															
Brn. Highly altered.	4	~2.		-	80	3				·					-	
- Much Limonite stan	Tr,	Glay		-		5									-	
458 Much Tale	1	V No	pyrite													
Coarse-grained.	<b>F</b> F						I									
F Broken up	4/		cocite (	-	1			ļ			· · · · ·				-	
- Broken up + 459:460 Medium-grain	1/2			) 07 -	100	4		.	ļ						-	
equigranular Granite Buff Moderately 462 altered.	W	frac	• <b>s</b>			,										
Buff Moderately	$ h\rangle$	,,,			1										-	
462 altered.	1/			-	┨───										-	
- Granite Gneiss,	1/						.147								_	
Slight to moderate	17								ļ							
- alteration, Matics all	14			· -	90	4									-	
- altered	K4			-		•								}	-	
466	F															
	M								1						-	
- Med-grain equigranular Grani 468 Hichly altered	5+		1.	- 1 .7	100	2									l' -	
468 Highly altered.	17	Much s	ericite. F	e-stained											·	
	17															
- Grante Gneiss,	12			• -											-	
- slight to moderate	$\mathbb{N}$					_									-	
alteration, Foliations	X		•		40	5			ļ		.5	.095	-			
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	1/2											r.				
- 482 Highly altered, Much 483 Fe-stain		-			1										-	
483 Fe-stain	1			-	╢		,200								-	
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Broken & altered -	1				100	-						•.				
	1 - 2 - 2     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     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     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     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				11				i .					<ol> <li></li></ol>		

A-2 HOLE NO. DIRECTION Form 33e32 (9-66). Gu - 34 Vertical PROPERTY NATION 5-12-70 EL PASO NATURAL GAS COMPANY. ATION AR COORD. N. DIAMOND DRILL RECORD PLETED CON AR ELEV. DEF SCALE _____ 4 " 26 NOTES BY. OF SLUDGE ASSAYS CORE ASSAYS % 90 ROCK AND ALTERATION GEOLOGY REC. SECTION SECTION 491 Granite Gneiss Moderately altered. Matics mostly altered 493 Limonite & tale in fracs 2 100 No pyrite ,252 3 20 broken, much tale 496 Becoming more altered \$ proken up 4 90 500 Sol-503' Vhighly attered . Kaolinized, Limonite 503 Stained 65T 3 503 3 158 506 3 757 509 509-505 V highly altered, much clay & Dimonite 4 90 513 Much tale on . 142 fracs 5 100 518 5 100 521 - V highly altered. Color brn, 523 almost blk. Mucho limonite &-tale 200 75 1 524 Becoming less altered Govee

4-2 Form 33-32 (9-66) DIRECTION_ HOLE NO .. C - 34 Vertical INCLINATION_ PROPERTY___ Emerald Isie 5-12-70 EL PASO NATURAL GAS COMPANY ARTED TION DIAMOND DRILL RECORD AR COORD. N. ... F LETED. RELEV SCALE 1=4 JL 12 OF. CORE ASSAYS SLUDGE ASSAYS % ROCK AND ALTERATION LoG GEOLOGY REC. SECTION CA SECTION 525 Granite Gneiss Moderatel, altered. + 527 Some Kaolinization 3 90 Limonite in fracs. No pyrite 3 70 529-534 highly alter. 530 ed. Much limonite stain. Kaolinized. 2 Tale in Fraces, Soft 532 broken up .221 100 100 3 535 Moderately offered. V broken np. Many Vertical fractures 100 3 538 Slight to moderate alteration. Limonite & tale in fraces but core generally Hary & not Fe-stained. 5 100 543 ,158 100 5 -Mn-stairen fracs 548 4 100 Fe & Mn-stain in fractures 552 .147 3 100 555 1 110 556 80 5

A-2 HOLE NO. DIRECTION Form 33-32 (9-66), (m-34 Vertical PROPERTY_ INCLINATION. 5-12-70 ATION EL PASO NATURAL GAS COMPANY R COORD. N. DIAMOND DRILL RECORD LETED JL SCALE 1= 1 OF NOTES BY_ CORE ASSAYS SLUDGE ASSAYS 90 GEOLOGY ROCK AND ALTERATION REC. SECTION SECTION Cu 561 Granite Gneiss Relatively slight to + 563 moderate alteration matics indistinct. Fe-stain, mainly in tracs. + 2 100 No pyrite ,158 Some Mn-stain on 5 90 tractures 568 - Gouge Ζ 100 570 571'-578' Highly altered. Much Limon-573 ite & clay. Some BO 3 ,168 Goethite. V broken up. 100 S 575 З 100 578 Granite Gneise Slight to moderate, alteration. V fractured 4 100 SBZ ,)37 Less fractured. 4 586 fractured. Some sousel & clay. Much Timonite 5BL-591 Less fractured slightly altered. Fe -. Some Mu-stain 5 95 on fracs stain on fracs ,137 591 V broken, some gouse З 80 594

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A-2 HOLE NO ... Form 33-32 (9-66)* DIRECTION Cu - 34 Vertical PROPERTY NATION 5-12-70 EL PASO NATURAL GAS COMPANY TION ËD AR COORD. N. _ DIAMOND DRILL RECORD LETED. AR ELEV. SCALE_1 = 4' JL NOTES BY. SLUDGE ASSAYS CORE ASSAYS % 90, ROCK AND ALTERATION GEOLOGY 512 Cal REC. SECTION SECTION Granite Gneiss Fe & Mn-stains on fractures 3 sq7 Relatively slight alteration. Matics altered & mostly annearal No pyrite 100 3 .121 600 Tr Hematite in frac 100 2 602 Highly altered. 4 95 606 Altered . 116 З 100 609 3 -Gouge. Much clay 100 612 3 100 615 .121 2 616-619 Highly 617 altered. Much Fer Bouge. Some Clay stain. broken 100 3 80 620 4 100 624 Becoming more broken up. Moderately altered. .121 100 4 628 3 100

4-2 HOLE NO. Form 33-32 (9-66) 6-34 INCLINATION Vertical 5-12-70 EL PASO NATURAL GAS COMPANY TION DIAMOND DRILL RECORD AR COORD. N. AR ELEV. 1'=4' HCL OF. NOTES BY SCALE SLUDGE ASSAYS CORE ASSAYS ROCK AND ALTERATION 0.0 GEOLOGY 40 REC. SECTION SECTION u 631 Granite Gneiss Fe-and Min-staining Broken altered. along fractures. Brecciated quarte 3 100 634 veins. Chlorite. Same. Much limonite. 635 Highly altered and 180 1 .105 breccisted granite Pale yellow veinlets at 637 gneiss. Chlorite 638 - attered epidote (?) 2 100 exidiced pyrite xtals. slickensides. 110 638 (acoz. 1 33 Same. EFCO LAB-TUCSON 4 100 Au Zn .053 ~ 642 0.03 41 995 453 Broken, but less altered bistie gravite. 93 3 645 Many Aragments. Visible Distite. 95 3 648 Same. .021 Gouge zone - slickensides - 75 4 652 .1 100 653 Very fine Fesz xtals in gray clay along fractures. 100 Hard, less altered 652-656! - No (2003 3 Very attered A precuated ,026 Some limmite. to 660. Soft frisble. 66 3 659 Much taic or sericite . 659 Mare solid, less 190 1 attered granite gness. г 100 662 .021 90 2 664 Same, Chlorite. Many reliet Fess lemlets

A - Z HOLE NO. DIRECTION Form 33-32 (9-66) Cu-34 -90 PROPERTY_ INCLINATION. 5-12-70 EL PASO NATURAL GAS COMPANY STARTED. ATION R COORD. N. DIAMOND DRILL RECORD TED FLEV HCL 1"=4' NOTES BY___ SCALE_ CORE ASSAYS SLUDGE ASSAYS GEOLOGY ROCK AND ALTERATION 1. REC. SECTION SECTION cu EFCO LAK Granite gneiss, fairly solid oxidized to limonite. PPN Рb En Cu Ru Ag MnOz staining. No core. 042 4 100 0.11 1.2 18 +1000 62 3 668 Broken, altered granite gueiss. High angle 3 95 fracturing. <u>671</u> Limonite stain. Same. Fairly fresh granite 672-674'. ÍÔO 3 674 No CaCO3 674.5 33 1 .021 Less attered granite gneiss fragments. May have hit strong gauge Same. 6.5 21 zone. Poor core recovery. 681 MADZ staining Same. Few Fesz xtals. 2 100 683 Alternate soft, broken 100 2 685 and fairly hard, fresh granite queiss. No Callos 95 3 .016 688 Same Tr. hematite 100 4 692. 692.5 Foutt gouge. - Slickensides. 10 0.5 Gouge Highly altered and broken. Pegmatitie -696 some feldspar xtals. 100 3.5 Fesz Xtals in gray altered zone 695.8' More solid, dense. ,016 core. Altered. Blebs liematite after 5 100 pyrite stals.

H-Z Form 33-32 (9-66) DIRECTION HOLE NO. -90 C-34 INCLINATION. PROPERTY_ 5-12-70 STARTED EL PASO NATURAL GAS COMPANY ATION DIAMOND DRILL RECORD R COORD. N. TED HLL 1"=4' NOTES BY_ SCALE_ CORE ASSAYS SLUDGE ASSAYS % Lo G GEOLOGY ROCK AND ALTERATION 10 REC. SECTION SECTION cu 701 Very broken, stered Fine Fesz xtals. granite gneiss. 4 75 Slight Colog Test. Altered, but more .011 solid core. 100 2 Same, Stringer Fesz blebs. Some - Cacoz reactions. 710 Fracts 40° to core. 100 3 limmitic staining. Very attered granite gneiss , 3 100 EFCO LAB-TUCSON (PPM) 713 Au Ra Altered, but solid core Pò Zn Cw No Minute Fesz Xtals segments. Flat slicken-sides at 716', with clay. 716 0.13 -1.0 47 3 72 61 83 3 .oZI Same. Fesz stals in gray clay. 4 75 720 Same. Thin gray day seams in fractures. Same. 4 92 Altered. 724 .016 same. Chlorite. 2 100 726 726.5 Clay or gouge conc. 20 0.5 Very attered gramite 100 Z.5 -729 gueiss . Chilorite 130 1 100 Less attered. Some 73<u>|</u> 50 1 732 biotite present. Chlorite. 100 1 Broken Stagments 3 .032 granite queiss. Gray 83 135 Clay servis.

A-2 HOLE NO .-DIRECTION_ Form 33-32 (9-66)-INCLINATION _____ Cu - 34 -90° PROPERTY_ TION EL PASO NATURAL GAS COMPANY LOC ε._ AR COORD. N. .... COMPLETED. DIAMOND DRILL RECORD COLLAR ELEV ... DEPTH HCL SHEET ____ 18 OF. 1"=4' NOTES BY___ SCALE_ SLUDGE ASSAYS CORE ASSAYS 90 ROCK AND ALTERATION GEOLOGY 0/0 REC. SECTION SECTION Tr. Fe52. Some Highly altered granite gneiss. Brecciated. hematite staining. 3 100 Slight Cacoz test. 738 Same, with somewhat less atteration. Chlorite. EFCO LAB - TURSON (DPM) 4 9/2 Biotite. Pb Au Ag Zn Cu Nio 742 74 64 37 3 0.13 -1.0 Some to 744! .042 ~ 145 Peamating 744-745' Cacos in pegmatite. 3 100 Alt. granite gueiss 745-747 Biotite, chilorite. 90 3 E C2 CO3. Pegmatite 747-754. 148 Feldspor, gte. 4 coleite. 5 75 Pegmatite, altered Fesz xtals 75<u>3</u> Alt., brecc. gromite gueiss. Chlorite, biotite .032 3 83 1 Calloz Thin pegmatite 758! 3 <u>759</u> Highly altered, brece. granite gneiss. 3 83 762 Biotite & chlorite. Very strong atteration of Scottered FeS2 atals. 762-765! 3 100 .031 765 Same. Limonite staining. 3 87 768 Same Z 710

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A-2 HOLE NO .. Form 33-32 (9-66) DIRECTION_ INCLINATION -90° Cur-34 PROPERTY_ STARTED _ 5 -12 - 70 EL PASO NATURAL GAS COMPANY LOCATION. DIAMOND DRILL RECORD COMPLETED ____ COLLAR COORD. N. COLLAR ELEV ... DEPTH_ 19 HCL _0F_ NOTES BY_ SHEET _ SCALE. SLUDGE ASSAYS CORE ASSAYS % Log ROCK AND ALTERATION GEOLOGY 010 REC. SECTION SECTION Cus Broken and altered 4 A A.V 172 Chilorite, Stickensides \$4 г 100 Calba EACO LAB - TUCSON Some limmitic stain. ppm Limey. AU Ag Pb Zn Cu Mo V 042 90 3 Same 0.13 -1.0 41 80 117 3 775 Same 97 3 778 Highi, altered and 180 broken. г 100 Fesz on fractures shows less alteration Some biotite, chlorite. Cacoz. .3 183 Slickensides. 100 .032 Intense atteration and preciation of granite gneiss. Chlorite, talc or 198 4 sericite. 787 Same . Clayey 3 100 790 Same. 4 ,016 75 794 Altered, broken fragments granite 95 3 797 gueiss. 2 100 199 Same 50 3 802 .042 Z 100 804

<u>A-2</u> HOLE NO. Form 38-32 (9-66) DIRECTION. -90" INCLINATION ___ 5-12-70 EL PASO NATURAL GAS COMPANY STARTED_ LOCATION DIAMOND DRILL RECORD ETED AR COORD. N. COLLAR ELEV. HEL 20 111 = 41 ES BY SCALE SLUDGE ASSAYS CORE ASSAYS % ROCK AND ALTERATION 90 GEOLOGY REC. SECTION SECTION a Altered but fairly hard of Very small Fesz KTals. BOT granite gneiss. Chlorite of Cacos. 100 3 Same 90 2 809 some. Stickensides E Limonite. Calla. 100 2 811 Granite queiss frag-813 *ments*, .02/ 2 100 Limmite Same, Z 45 BIS Broken, but fairly BIG hard fragments 80 1 BIT granite queiss. Chlorite 75 1 Some lime. ""×1" calcite xtal-819" 100 3 Brece, atternal granite gneiss. Chlarite. Caco3 3 100 .016 823 Brokens fragments granite guess. 826 Slickensides Chlorite 100 3 Small calcite xtals - 825! 828 Same. 2 100 829 100 1 Same. ptored permatite. Cally in pegmatite. 3 100 .021 832 Strong strusting 831-832 Broken, altered pegmotite. Orthoclase feldspor xtals, chlorite. Calloz 3 95 292 Broken, angular frag-ments granite queiss. EFTO LAB-TUCSON/DA Tr. Fesz. Au Ag Рb Zn Chlorite. No Cu 5 66 0.17 -1.0 55 70 115 3 032 840

H-Z DIRECTION HOLE NO. Form 33-32 (9-66) -900 Cu-34 INCLINATION_ PROPERTY___ 5-12-70 ATION EL PASO NATURAL GAS COMPANY STARTED Ε., DIAMOND DRILL RECORD COLLAR COORD. N. _ COMPLETED. COLLAR ELEV ... _OF__25 HCL 21 1"=4' NOTES BY_ SCALE_ SLUDGE ASSAYS CORE ASSAYS 90 ROCK AND ALTERATION GEOLOGY °/o SECTION TO REC. SECTION Fac 841 Altered, breccisted 10 842 granite gneiss. .063 Calcite stals coating 70 1 Many angular frag-ments. Biotite, some fracture planes. 95 2 .063 844 chlorite. Few pyrite stals. 3 100 52me. 841 Limmite stain. 3 53 .016 calette xtals. 850 90 1 851 Same Ĵ 43 .053 354 Very strong atterstions Clay and small fragments. Limey. Chlorite. 190 3 Some iron-staining. 951 Same, 3 60 .021 860 Altered, with more angular Leagments. .053 3 43 Thin regmatite. 863 Strong alterations. Gray clay zone - Swilt (?) Considerable chilorite. Limey .063 100 3 866 Same. 95 4 870 Paymatile 869-874. ,0Z1 i sy Pink feldspar xtals. Tr. Fesz. Q. 75 ¢-814

A-2 HOLE NO ... DIRECTION. Form 33-32 (9+66) -900 45-24 INCLINATION __ 5-12-70 STARTED. EL PASO NATURAL GAS COMPANY AR COORD. N. _ LETED. DIAMOND DRILL RECORD AR ELEV. 22_0F_25 NOTES BY HCL j"=4' SCALE_ SLUDGE ASSAYS CORE ASSAYS 90 ROCK AND ALTERATION GEOLOGY REC. SECTION TO 2/0 SECTION w slight lime on fractures. 08 Attered granite gneiss. 3 877 Broken, chlorite. 2 .011 90 879 Pegmatitic granite 879.5 - 882. Limey. Four Fesz xtals. Some chilorite. 4 100 BBS Alt., brecciated gray granite gneiss. Chimite Same 75 г 885 Same, strong atteration. Increased chloritization. Limmite staming. Some clay zones. Callz. 30 5 .063 .016 890 Some to 892'. 100 2 892 From 892 - 896 , strand but much more .047 slight Calls on fractures. solid core. Granite 90 3 895 anoiss. Chlorite. 95 г 897 At 897, pegmatitic .021 Moderate Coloz in peggranite. Alt. preceisted matite. QTZ. & feldspar. 90 4 Little chlorite. 901 Alt., broken pegnistite. Some 190 2 903 903-908. Altered, broken. Do large pink fellspare xtals. EFLO LAB TUCSON (ppm) 90 4 .037 -Au Ag Zn Gu Pb No 901 104 273 6 51 0,13 -1.0 - At 908, altered granite Tr. FeSz in gray gruge 909 queiss. Some stirng alteration. Ang. fragments. Jalong slickensides 911'. 100 2

A-2 HOLE NO. Form 33-32 (9-66) DIRECTION au - 34 -900 OPERTY INCLINATION 5-12-70 ION EL PASO NATURAL GAS COMPANY PLETED 6-10-70 COORD. N. DIAMOND DRILL RECORD 1000 DEP NOTES BY_ HCL 1" = 4' SCALE SLUDGE ASSAYS CORE ASSAYS LOG ROCK AND ALTERATION GEOLOGY do cu REC. SECTION SECTION - Altered granite <u>912</u> givess to 917! 99 3 .032 Ζ 80 914 Z 100 916 <u>918</u> Pegmatitic granite. 917-918. Chlorite. Z Annute Fesz xtals. 100 From 918; sitered, .037 4 broken granite gueiss 00 <u>922</u> to scout 923, then less altered to 928. EFCO LAB TURSON (ppm) 3 120 ALL Ag No Рb Zn Cu 925 ,0*e*Z 0.20 -1.0 28 85 151 4 stickinsides and 3 100 This gauge seams. 928 Fairly hard granite gneiss. Unatterred bictite. slight hematite stain , Some vertical fracturing. 4 100 932 .026 Same. 4 100 Highly altered 934-936'. Few Fesz xtals on fructures. <u>936</u> Gouge clay J 4 100 Broken fragments 940 attered granite gueiss. Biotite 2 75 .021 942 slickensides. Some 2 100 944- More solid core. String atz. 945.

A - ZHOLE NO. Form 33-32 (9-66) DIRECTION 11-34 -90 INCLINATION 5-12-70 EL PASO NATURAL GAS COMPANY PLETED 6-10-70 COLLAR COORD. N. DIAMOND DRILL RECORD 1000 AR ELEV. DEP CO 25 Z4-HCL NOTES BY. 1"=4 SCALE CORE ASSAYS SLUDGE ASSAYS -06 GEOLOGY ROCK AND ALTERATION •10 REC. SECTION SECTION cu i Cacoz *95*1 3 947 Fairly hard, partially altéred granite gneiss. Biotite é clilorité. 950 Pegmatite 948-950! 90 3 Cacoz Hard granite gneiss. Tr. Fesz. Hemotite. 952 Some alteration, Biotite. 100 2 .OZI Brecciated, altered Fesz in slickenside 954! 90 granite queiss. 3 <u>955</u> 100 1 956 Same, Little clay. Caco3 3 70 Same 959 More brecciation. ,016 Fesz 4 100 963 Very strong breeciation Limonite 90 3 and alteration. Some clay. 966 Chlorite. Same. 95 3 969 Fesz Broken, attered granite gneïss. Biotite + chlorite. .011 66 5 974 Same, strong atteration. Calute stals in fractures. 12 751 4 979 3 ,016

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A-2 HOLE NO. DIRECTION. Form 33-32 (9-66) -90° INCLINATION PROPERTY 5-12-70 EL PASO NATURAL GAS COMPANY LOCATION STARTED LETED <u>6 - 10 - 70</u> COLLAR COORD. N. DIAMOND DRILL RECORD COMP 1000' COLLAR ELEV. DEP 25 25 .0F_ HCL 1"=4' NOTES BY_ SCALE_ SLUDGE ASSAYS CORE ASSAYS % 00 GEOLOGY ROCK AND ALTERATION 010 REC. SECTION SECTION w 981 Broken, angalan fragments granite gneiss. Altered. C2 CO3 Biotite & chlorite. 80 3 Some, strong atteration is Limonite 986-987 ! 100 5 987 988 100 1 .016 Sancin 4 Calls 50 99Z Strong atterations, clayey zone in grounte queiss. Limmite 3 44 100 EFOD LAB-TUSSON (pp n1) 995 Slickensides Tr. Fesz in black A gruge - 994! Pb AU Ag Zn Gu No Some gtz. .042 297 Biotite & chlorité. 90 г 13 58 -1 61 0.13 -1.0 Same. CalOz 3 100 1000 T.D. 1000' JUNE 10, 1970 RECOVERED 220' NXWL CASING. NONE LEFT IN HOLE.

Form 33-32 (9-65)

SCALE_

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

1"=4'

DIRECTION_ -900 INCLINATION ____ 6-12-70 STARTED _ COMPLETED - 7- 3 - 73 8491 DEPTH __ NOTES BY HCL

DDH A-3 HOLE NO ... Cu-34 PROPERTY___ LOCATION EMERPED 1515 ARIZONA COLLAR COORD. N. ...E... COLLAR ELEV. SHEET _____OF_____

ROCK AND ALTERATION	90	GEOLOGY	%		CORE	ASSA	YS		S	LUDGI	E ASSAY	'S
ROCK AND ALTERATION	د ا	GEOLOGY	REC.	SECTION					SECTION	e/0 iu		
- Alluvium. Sand, gravel,	6											
cobbles and boulders.	Þ	-			•							
- cobbles, and boulders. Rock bit to 265! - Set NXWL casing	0	-								.053		
- Set NXWL casing	N.,											-
- to 270. Coved thru	5.	· -										-
to 270'. Correct thru granite boulder 165-180. Cored 220-221', and thru boulder 252-255'.	.0	-										
Cored 220-221, and Thru		-										
						1						
- Phlogopite nuca. Quartz - and queissic fragments. 10 Granite + schist.	3									053		
- and aneissic fragments.	201											
10 curite & schist.	5.0											
	O							-				
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Form 33-32 (9-66)	•		DIRECTION		900			HOI	LE NO.	Y	(11-	-34	 ا			
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EL PASO NATURAL GAS COMPANY			STARTED -	7-9.	- 70										*********	
DIAMOND DRILL RECORD			COMPLETE	849	1					COORD.				. E		
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SCALE 1"=4"	-		NOTES DI											Million - Logo - Logo		
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Allarium End and	4															
- Millin. Sava, grovel,	$\mathbf{D}^{\circ}$				-											-
cobbles, and boulders.	[ii]				_											4
Riptite and phlacoute	94												.053			
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mile, quariz dragments.	12		7		_											4
Alluvium. Sand, gravel, cobbles, and bruiders. Biotite and phlogepite mica, quartz fragments. 40 Enciss fragments. Granite and scinst.	19															
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Form 33-32 (9-66)

SCALE.

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

1"=4'

DIRECTION. - 900 INCLINATION. <u>6-12-70</u> 7-9-70 STARTED. COMPLETED. 849' DEPTH. HCL NOTES BY_

DDH A-3 HOLE NO ... au-34-PROPERTY_ LOCATION EMERALD ISLE ARIZ. COLLAR COORD. N. Ε.. COLLAR ELEV. 25

_OF___

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ROCK AND ALTERATION	Loe	GEOLOGY	%	. 1	CORE	ASSA	YS	SL	UDG	E ASS	AYS	
		GEULUGI	REC.	SECTION				SECTION	e/o Cu			
Alluvium. Sand, gravel, cobbles, 4 boulders. Granite and gneiss. Some schist and gtz. fragments 75 Philogopite and biotite mica.	Stor Contract								,032			1 1 1
	9.1. NO. 7			-					.037			
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Form 33-32 (9-66)

EL PASO NATURAL GAS COMPANY

SCALE_1"=4'

DIAMOND DRILL RECORD

DIRECTION_ - 900 INCLINATION___ STARTED 6-12-70 COMPLETED 7-9-70 8491 DEPTH ___ HLL NOTES BY___

HOLE NO. DDH A-3 PROPERTY CW-34 LOCATION EMERALD ISLE ARIZONA COLLAR COORD. N. __ ε.. COLLAR ELEV. 25 SHEET _____ _OF____

			%		CORE	ASSA	YS	SI		E ASS	AYS	
ROCK AND ALTERATION	106	GEOLOGY	REC.	SECTION				SECTION	°Io Cu			
- Fillevium. Sand, grovel,	D.	-										_
- Finite and boulders, - Cobbles, and boulders, - Granite and gineiss. - Some schist and giz. 110 fragments, Biotite and phlogopite mica.	0	· · · · ·										-
- Granite and gueiss.	0.3	_							.032			_
Some schist and atz.	$\left  \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	_										
110 fragments, Biotite	]=0/	-										
and phlogopite mica.		. –										-
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Form 33-32 (9-66) EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD			DIRECTIO INCLINAT STARTED COMPLET DEPTH NOTES BY	10N 	- 9 - 7 49'	0		PRC LOC COL COL	PERT	Y N <u>EM</u> , COORD.	<u>CU</u> <u>ERF</u> . N	<u>A</u> 3. 	4 51 <i>E</i> ,	<i>A<u> </u>212</i> _ e	ioni f	9
SCALE	-					7,		CORE	ASSA	YS		SI	UDGE	E ASS/	AYS	]
ROCK AND ALTERATION	L0G		GEOLO	GY			SECTION					SECTION	0/0 (1)			
- Alluvium. Sitt, sand, gravel, cobbles and brulders. Granite and gneiss. Otz fragments. 145 Biotite and philogopite	1:0:0: - 10. V												.021			-
- mica. - - 	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				-				•				.026			
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Granite bouider cored. Could not rock bit.	2 2 2 2 2 2 2 2 0 0 0.	Irou-	staining		- - - -	190	ح	ווֹא								
	1.2.0	Some	CaCOz		-	50	2									_
- Granite boulder - 172 - 176'.	1 a la la la la				-	100	3									-

Form 33-32 (9-66)

SCALE_

EL PASO NATURAL GAS COMPANY

DIAMOND DRILL RECORD

1"=4'

DIRECTION_ -90 INCLINATION_ STARTED 6-12-70 HCL NOTES BY_

HOLE NO. DDH A-3 PROPERTY_ CU-34 LOCATION EMERALD ISLE ARIZONA COLLAR COORD. N. Ε.. COLLAR ELEV .... 25 SHEET _______ _OF__

		LOG	GEOLOGY	%		CORE	ASSA	YS	SI	UDGE	E ASS	AYS	
	ROCK AND ALTERATION			REC.	SECTION	"in			SECTION	0/3 (w			
	- Broken, angular - granite Stagments 176- _ 180'.	5		35	5	Nil				.053			
	- boulders. Granile - and gueiss, Alica	3 1: 1/ 2 1 - 1 - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2								.03Z			
	<u>185</u> 	North Start								.026			
	  	XIONU CIEK								.021			
2	- - - <u>-</u> <u>-</u>	2005% 3 C 2								.026			
	- - - Zaj ^e	Alter of the of the								.037			
	- - - 210	5. 3 V 1. 1 2 3 - 3	- - - -							.026			-

Form 33-32 (9-66)	DIRECTION	A	HOLE NO. DDA	H A-3
	INCLINATION STARTED	90° -70	PROPERTY CH	1-34 ALD ISLE, ARIZONA
EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD	COMPLETED 7-9	- 70	COLLAR COORD. N.	
DIAMOND DRILL RECORD	DEPTH	,		
$SCALE_{1} = 4^{-1}$	NOTES BY 4C	6	SHEET	OF
			a	T
ROCK AND ALTERATION	GEOLOGY	REC. SECTION	CORE ASSAYS	SLUDGE ASSAYS
Alluvium. Sand, gravel,		-		-
Coubles, and boulders. Granite and gueiss. Mica. Qtz. fragments				.032
215				
		-		
				- 520.
220 Cored 220-221! 221 Broken granite,	• <b>*</b> *	70 /	. 037	
221 Broken gramie.	. · · · · · · · · · · · · · · · · · · ·		.037	
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Form \$3-32 (9-66) EL PASO NATURAL GAS COMPANY		DIRECTION INCLINATION - 900 STARTED - 3-12-7	0			0001	~~	1	1 A - 2-34 ALD 1	-	<i>R</i> E	21201	JA)
DIAMOND DRILL RECORD		COMPLETED 7-9-7	0	•			COORI			·	_ E	d	
SCALE	-	NOTES BY HCL				LAR ET	ELEV.	3	OF	س ج			
ROCK AND ALTERATION	907	GEOLOGY	% Rec.	SECTION	CORE	ASSA	YS		SI		E ASS	AYS	
Alluvium. Sand, grouch cobbles, and boulders.	XSUONO	- - -			Cu					<u>a</u> .053			
250 252 Cored hard granite 253 boulder 252-255!	いない		6										
253 boulder 252-255. 255 Some gneissic fragments.	12 1-123	-	50 30	2	.084					.04Z			
											·		-
	NON?	- - -								. 110			-
- -	16.0 [1:	-											
TOP GILA CONG. 264! 265 started ering 265!	C: :: :	Tr. Cu 5103 fragmicuts in - pin 264-265'.								.210			
- Gila conglomerate.	0.0	Leached Gesica 265-266!	100	4	,505								
- Gravite, gtz. some 269 epidoté.	0.000	Limmite and MINOZ _ staining Hematite											
- Same	0.0.0.0.0.		100	5	.236								
	0.0.00.0	Leached CuSiOz.	<u> </u>	Ŝ									-
277 Biotite mice. Some	0	MNOz around fragments, - Possibly some tenerite(?)- 16 GCO3 -	100	5	-189								

DDH A-3 DIRECTION. HOLE NO ... Form 33-32 (9-66) -90° Cu - 34 PROPERTY_ INCLINATION. LOCATION ENERALD ISLE . ARIZONA 6-12-70 EL PASO NATURAL GAS COMPANY 7-9-70 COLLAR COORD. N. ... DIAMOND DRILL RECORD COMPLETED. 8491 DEPTH ___OF___ZJ HCL "=4' NOTES BY_ SCALE. CORE ASSAYS SLUDGE ASSAYS 00 ROCK AND ALTERATION GEOLOGY REC. SECTION U SECTION NINOZ. Hematite a limonity. 202 Gila conglomerate. Granite, queiss fragments. White inter-Faint green stam - possibly stitial clay. Coarse sand. leached Cusioz. 5 Quarte fragments. Also 100 rhyolite. Fragments both 237 Engular and rounded. Soft, broken at 286-.200 287! No au visible - some black White talc fragments. may be tenorite. 100 5 Some epidote. 292 Same. Biotite granite No Ca visible fragments. Epidote white talc or Kaclin. 5 100 399 Same. Fairly Well No Cu visible convented. 4 90 301 Mineralized zone 302-Fractures in boulder miner-307: Large gueissic alized with CasiOz benelder 302-303.5! 1.35 5 100 Well commented Gila conq. Good Cusio3 303.5-307! Botryoidal formation of 306 chrysocolla and black mineral- pinde or GeO-tempite Pale Cusiog stands leaching Front 307', Gila cong. .22 5 190 shows more Tan clay. No visible Car, but black 311 Sitty. Some epidote may be tenorite. staining. Black staw. Negative au - 100 Cong. more sandy and 4 ,80 50000 test with noil and acid. 315

Form 33-32 (9-66) EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD		DIRECTION INCLINATION STARTED7 COMPLETED_7-9-7 DEPTH NOTES BY HCL	<u>0</u> 0 ·	· · ·	LOC	DPERT CATIO	- <u>y_</u> N <u><i>EM</i> COORI</u>	<u>и -</u> Еррі Б. п	- <u>34</u> - <u>34</u> 20 15	IE,	E	ZONF	?
SCALE = 4 '	-		I	· · · · · · · · · · · · · · · · · · ·					1				
ROCK AND ALTERATION	LOG	GEOLOGY	% REC.	SECTION	CORE	ASSA	YS		S		E ASS	SAYS	
Gila cong. Soft, broken. Granite fragments epidote. Sandy zones. Mica. 320		Fe and MnOz staining. No CaCO3. No Cu visible. -	60		.53								-
	Vio 10192	-	100	3			-						-
- 52me.		- Fairly string MinOz zone-	Т5	4	.50								
327 Gila cong. Broken.	V. Sivers	Same No Cu visible	80	3									
Same. Large biotite granite boulder. 333	1. 1. 2. 1. 1. S.	NINDZ on tenorite(?) - CN possibly black - chrysocolla.	, 100	ور									
- Same, - - - 338	Actor of a contraction	Linnenité staining	100	5	<i>J.29</i>								
Gila cong. Some grantlic fragmes:t3. 342	125. U.S.Y. S.	MnOz with white tale or Kashin, Limonite No visible Cu. Black - niay be tenerite or black.	100	Ą									
- Sime,	いいのからい	chrysocolla,	90	مى	1.14								
- Same. Fragments - show fracturing.	えいいい	Limmite & Mule.	100	5						-	-		-

DDH A-3 HOLE NO ... DIRECTION. Form 33-32 (9-66) -900 <u>Cu-34</u> PROPERTY_ INCLINATION. LOCATION ENERALD ISLE ARIZONA 6-12-70 STARTED. EL PASO NATURAL GAS COMPANY ETED 7-9-70 DIAMOND DRILL RECORD COORD. N. 8491 OF..... SCALE _____ = 41 ES BY. SLUDGE ASSAYS CORE ASSAYS % 90 ROCK AND ALTERATION GEOLOGY SECTION 90 SECTION 0/0 REC. Broken Gila englomer-Si Limonite and mangane. 352 ate. Angular fragments & stain. MnDz as erratic granite, some gtz. Stringers. Some tak or Limonite and manganese stringers. Some tak on ,26 Rhyolité cobble at Kaolin. 357.' 100 5 Hematite staining. 357 stickensides -358 . 23 5 54 5 GRANITE CONTRET AT ABOUT 360' 362 From 360-367, . 19 extremely altered, broken is Limonite, hematite and manganese staining. granite. Mainly sandy clay and fragments. 5 90 367 Eron 367-393! highly altered granite. 5 .21 5 20 Feil soft clayey sand Committee and Mnoz zones, but more staining. .35 372 solid segments of Tale or Kaolin lenses. core. White clay. 3 No Calla 95 375 5 100 380 .08 5 100 385

DDH A-3 HOLE NO. Form 33-32 (9-66) DIRECTION -900 - 34 PROPERTY_ INCLINATION_ LOCATION EMERFILD ISLE ARTONA 6-12-70 EL PASO NATURAL GAS COMPANY STARTED_ COMPLETED 7-9-70 DIAMOND DRILL RECORD COLLAR COORD. N. 8491 DEPTH . COLLAR ELEV. _OF___25 IZ HCL NOTES BY_ SHEET 1"=41 SCALE .... SLUDGE ASSAYS CORE ASSAYS % 00 GEOLOGY ROCK AND ALTERATION 0/0 REC. SECTION SECTION Cw In Hematite, limmite, and Highly attered granite. MINDZ starned Soft, but cores well, 95 4 Much Kachin, Tale or sovicite. Biotite mica. 389 .37 3 100 392 100 1 393 From 393-400! Highly altered epidote Episota contains numerous stringers of MinDa Which go zone. Altered to a soft, serpentine -like 5 may have exidized Fesz. greenish day. Limmite staming. 398 .15 From 400- 415, very attered, brecciates, 100 5 Kaolin m talc. 403 gross. Mach clay. Lynin Ce. Few stringers of altered chidote. 5 100 408 .09 Samle, 75 4 412 110 core recovery. 3 0 415 Greenish - gray highly attered epidotized gramite or epidote. Soft, broken. Practures filled with NINDZ stringers. 5 - Some biotite, but mice is X 100 .69 Linionite. mostly altered. 420

DDH A-3 HOLE NO. _ Form 33-32 (9-66) DIRECTION. -900 11-34 PROPERTY_ INCLINATION_ LOCATION EMERALD ISLE PREIZONA 6-12-70 EL PASO NATURAL GAS COMPANY COLLAR COORD. N. ____ DIAMOND DRILL RECORD 8491 COLLAR ELEV ... HCL 13 1"=4' NOTES BY___ SCALE_ CORE ASSAYS SLUDGE ASSAYS ROCK AND ALTERATION Lo G GEOLOGY REC. SECTION SECTION MINDz and limmite. Epidote granite. Some biotite, but sitered also to phlogopite nica. Soft, broken 5 20 .40 425 some. Picked up z' of core from previous run. 3 100 428 More granitic with some Elimonite and MinOz. epidote. Highly altered. Biotite mica. Slickensides. 5 90 433 ,36 Sanie. Increasing More MnOz mineralization. altered epidore. Some clay zones Slickensides. Linionite. 5 100 Biotite. 438 Epidotized gramite. MinDz along fractures. Bistite and philogopite Linconite mica. 5 100 443 .41 Some. Slickensides. Same. 5 92 48 Some . Fairly bright Erratic stringers with; yellow-green. Minoz. May have contained -This continues to 455! some pyrite-new oxidized. 100 5 .61 453 From 953, stered, explised MIDZ, Timonite, few this gneissic granite, Soft,

DDH A-3 HOLE NO. Form 33-32 (9-66) DIBECTION -900 Qu - 34 INELINATION_ PROPERTY_ 6-12-70 LOCATION EMERALD ISLE, FARIZONA EL PASO NATURAL GAS COMPANY STABTED ..... 69MPLETED 7 - 9 - 70 DIAMOND DRILL RECORD COLLAR COORD. N. _ 8491 BEBIH COLLAR ELEV. OF 25 HCL 1"=41 SUFET SCALE CORE ASSAYS SLUDGE ASSAYS % BOCK AND ALTERATION ő SECTION 25 **<u><u>e</u>E**<u>o</u><u>r</u><u>o</u><u>o</u>A</u> 0/0 REC. SECTION Cu broken, some clay or hematice stringers. よ 56 5 tale. 458 Breccisted, highly attered & Limonite and MINDZ granite gneiss. Biotited staining. phlogopite, Some slicken-5 76 sides. 463 .13 Same. More silicification Same. 5 5 .17 52 468 Same, stickensides. 80 2 470 Highly altered, but with more solid core semients. NINOz along fracture planes. Some high-angle fracturing. Limonite. 60 5 Breccisted. .03 475 Same. 67 3 4*73* Altered fragmants of MADZ coating on fractures. Limonite, tr. hematite. biotite granite gueiss. Kaplin or sericite. 5 60 *483* .068 Same. Vertical fractur-Same jing . 74 5 438

DDH A-3 HOLE NO. DIRECTION Form 33-32 (9-66) -900 PROPERTY <u>CU-34</u> INCLINATION. LOCATION ENERALD ISLE ARIZONA 6-12-70 EL PASO NATURAL GAS COMPANY STARTED. ЕТЕD 7-9-70 AR COORD. N. DIAMOND DRILL RECORD 8491 0F----NOTES BY 1"=4' SCALE ____ SLUDGE ASSAYS CORE ASSAYS 106 GEOLOGY ROCK AND ALTERATION % CU REC. SECTION SECTION Limonite, tr. hematite, MINOz stained. 75 4 Altered biotite granite 492 grieiss, Kaplin or sericite. Some phlogopite mica. 3 *83* .032 495 95 г 491 some. Highly altered and precisited. Many small Gragments. Same 70 5 50Z Same. Biotite showing more lineation - gueissic. .011 Same 5 60 507 Extremely altered biotite growthe gness. slickensides 509', with 5 4 .07 100 511 clay. .094 5 40 SAML 516 ښى 90 521 At about 521, core .21 Black costing (Aluge?) . is more gneissic with increasing fine biotite, fractures. Limonite. phlogopite and epidote. 5

DDH A-3 HOLE NO. Form 33-32 (9-66) DIRECTION -900 -34 Cu INCLINATION PROPERTY. ION EMERALD ISLE PRIZONA 6-12-70 EL PASO NATURAL GAS COMPANY STARTED COMPLETED 7-9-70 AR COORD. N. ... DIAMOND DRILL RECORD 849' DEPTH COL 1"=4' HCL NOTES BY_ SHEET SCALE CORE ASSAYS SLUDGE ASSAYS 90 GEOLOGY ROCK AND ALTERATION % Cil REC. SECTION SECTION Black coating on fractures. 526 Gueiss. Fine-granied. Also Immite. Epidote, biotite and phlogopite. 4 100 530 .51 Gneiss. Much biotite. Limmite along fractures. Epidote. Resembles relict pyrite?) 5 100 stringers. Biotite gneiss to 535'. 535 From 535-551, altered granite gneiss. 100 3 538 25 3 .03 541 Very altered 541-551? Limonite staming with Decomposed into small MuDz. fragments. Much Tale, 4 100 Kaphin on servicite. 545 4 100 .11 549 100 2 551 Highly altered broken a Limonitic staining. granite queiss. Kaolin & Limonitic staining. Black NINDE staming. or sericite. 3 100 554 4-100 .04 558 Fault gouge -558 2 Limonite. 560

DOH A-3 HOLE NO. DIRECTION Form 33-32 (9-66) -900 Cu-34 PROPERTY .... INCLINATION LOCATION EMERALD ISLE ARIZONA 6-12-70 EL PASO NATURAL GAS COMPANY ETED 7-9-70 DIAMOND DRILL RECORD R COORD. N. 8491 COLLAR ELEV. .0F___*25* HCL F7 1"=4' NOTES BY_ SCALE CORE ASSAYS SLUDGE ASSAYS % ROCK AND ALTERATION 8 GEOLOGY REC. SECTION SECTION Black MnOz staining Altered breccisted granite gueiss. Strong 563 clay formation. For along fractures. 3 100 Limmite. fairly solid core segments. Erotite. - Very altered 565' 01 4 100 chlorite. Tr. epidote some vertical fracturing. 5 Thin brown stringers -95 possibly oxidized Fesz. slightly harder core. Limmitic. 512 Same. More silicified Vert. fracturing 574. 3 100 575 100 3 .13 573 Same. Limonite. 3 100 581 Altered but more Some MIDZ and FezOz solid bistite granite gneiss. Fracturing 40° 4 along fractures. 535 to core. Relict Fesz stringer 585 Pegmatitic granite - 586-583', 588 3 .17 160 CaCO, in paymatite. Black costing in fractures. Fairly hard, less attered bistite granite MnO2 4 FezO3 STame, 120 4 gneiss. Dendritic MnOz pattern. 592 Pegmatite granite 593 of CaCO3 4

Form 33-32 (9-66)

SCALE__

EL PASO NATURAL GAS COMPANY

DIAMOND DRILL RECORD

1"=4'

DIRECTION_ -900 INCLINATION __ STARTED _______ - 12-70 COMPLETED ______ 7-9-70 8491 DEPTH ___ HCL NOTES BY_

HOLE NO. DDH A-3 PROPERTY <u>AL-34</u> LOCATION <u>EMERALD</u> ISLE, ARIZONA COLLAR COORD. N. E. E. COLLAR ELEV. SHEET <u>IB</u> OF 25

ROCK AND ALTERATION	96	GEOLOGY	%		CORE	ASSA	YS		S	LUDG	E ASS	SAYS	
			AEC.	SECTION	do Cu				SECTION				
596 Highly altered, bruken	RA PA	MINDZ on fractures											-
Biotite granic gneiss.	10	· · · ·											-
Many fragments.	10				. //								-
- Pegmatitic 600!	24		95	5									-
	· A												-
60/	2 2	-											-
Pegmatitie granite queiss													-
to 605'. Pink ontriocida 604 feldspar atals. More		Slight Lally	100	3									-
604 91115pt (1010, 1 10 0 605 9131772.	20												-
605	4		80	/									-
- Door core recovery.	er!	· · · _			.10								-
- Broken gramite Fragments	100	_	30	5									-
	30		50	2									-
610 Alternate granite	NA.				- 								-
giterss and pegnistine	9	· 											-
- granite to 617.	4	Mnoz on fractures -											-
- Clay on fractances.	G		100	5									-
	2		,	-	. 05								-
615 Vertical Seacturing	Nø												
	X	Limonite											-
617	A	· _	100	5									-
- Banded biotite granite		· _											-
_ gueiss. Fracture angle	<b>P</b>												-
30-55?	$\left  \right\rangle$	-	100	5									-
			100	د	.06								
622 Some high angle	10												
fracturing, Kaolin		MnOz on fractures.											
Gracturing, Kaolin 624 er sericite along fractures.	1 9 3	Limmite.	100	2									
JF4614F523	FA)	-											
- Pegmatitic 626'	UA V	Tr. Ga (03		4									
- Pegmallic com	50	<i>Ir. va vu s.</i>	100	7									
(28	5				.07			110 July -					
_	6		90	2						1			-
530	3.4		20	2									

HOLE NO. DDH A-3 Form 23-32 (9-66) DIRECTION_ -900 PROPERTY QU-34 INCLINATION_ 6-12-70 LOCATION FAREALD ISLE ARIZONA EL PASO NATURAL GAS COMPANY STARTED_ COMPLETED 7-9-70 COLLAR COORD. N. ____ DIAMOND DRILL RECORD 3491 COLLAR ELEV. __OF______ HCL 19 |"=4' NOTES BY____ SCALE SLUDGE ASSAYS CORE ASSAYS % ROCK AND ALTERATION 0.0 GEOLOGY 40 REC. SECTION SECTION a Altered, broken biotite Limmite and Mnoz 632 Oranité gneiss. 2 90 staining. 633 Some clay . 100 1 Some. Highly breccisted at 633'. Strong clay zone 636.5! 90 5 Many small exidized Relict Fesz vemilets with 638 stringers. NnOz. .09 Strongly brecciated and altered granite queiss 641 638-652 3 90 3 644 Strong fracturing. Limionite and MuOz staining almy Gractures, 2 100 646 Altered clay 647. - Norrow pegmetitie lense 649 648: Clay seam 3 100 .03 3 100 652 Clay zone -lost 1.5' core. 654 From 652 - 659.5' is fine-grained dike. May containe some minute 2 -20 sulfice xtals. 655 Altered. Broken, Limmite and MinOz stam. 100 1 .55 67 3 658 Altered biotite gramie gueiss at 659.5! 4 100 662 .16 4 100

HOLE NO. DDH 9-3 Form_33-32 (9-66) DIRECTION -900 <u>C11-34</u> PROPERTY___ INCLINATION LOCATION EMERALD ISLE RECEDNA 6-12-70 EL PASO NATURAL GAS COMPANY RTED. LETED 7-9-70 DIAMOND DRILL RECORD AR COORD. N. . 8491 COLLAR ELEV. 20 SCALE_1" = 41 _0F__25 HCL NOTES BY. SHEET _ SLUDGE ASSAYS CORE ASSAYS % ROCK AND ALTERATION GEOLOGY 0/0 (11 REC. SECTION SECTION 666 Altered, broken biotite Limonite & MnOz staining. granite gneiss. Higt angle in Some hematite. fracturing. 100 3 669 Same. Possible tr. leaded green au at 672 m Arschure. Same. 100 4 MnOz denarries. 673 Same, with vertical Strong Male staming frecturing. Biotite. on Fractures. .11 ¢ 100 Limmite. 677 Four flakes notice copper-of 679' on anticized fruct-ure face. Some disseminated. 35 3 680 Still attered, but more fresh biotite granite gueiss. clay on fractures. 4 95 684 Good showing native .07 Fresh granite queiss, about 686! with some attered encs. Green clay along fractures. 100 4 688 Notice couper in botto. - potered and fresh attared and fresh granite. granite queiss. Vert. fracturing. This pegnistite 5 100 691! 693 .06 Same. More alteration Sens scattered flakes along fractures. native copper. 5 100 Sanie.

DOH A-3 HOLE NO. Form 33-32 (9-66) DIRECTION -900 au - 34 PROPERTY_ INCLINATION LOCATION ENERALD ISLE ARIZONA 6-12-70 EL PASO NATURAL GAS COMPANY STARTED IPLETED 7-9-70 AR COORD. N. .. DIAMOND DRILL RECORD 8491 Hel .0F.... SCALE _ 11 = 41 ES BY. SLUDGE ASSAYS CORE ASSAYS % 50 GEOLOGY ROCK AND ALTERATION REC. SECTION 0/D SECTION Z Some limmite. Biotite granite gneiss. مح 90 Some alteration, but .04 nisse fresh granite. Some 703 chilorite. Same. Alteration on fractures. 3 100 106 Same. Coarse-grand, " 113the apper ou fractures on pegnistitic at about a of 707. Dendmitte Ninde stams. 98 5 ,12 708 711 Broken, altered biotite Much Minoz staining. granile queiss . Vert. Some timonite. fracturing . - 90 4 .14 715 Same 100 2 Same. .12 59 1 118 Same. 2 120 120 ,21 Very prokery attered strong limmite and 122 gravite queiss. Highly manganese staming . 75 г gracturee. 80 2 724 .09 Spine. AS 2 126 Clay 2010 726 - 727 ! No Cu visible. More solid granite gnerss 727-730. Angular .06 4-90 fragments. 130 Fairly hard, dense grounte Native copper along fractures gueiss . Thin coating courte along . fractures at 733' with native 3 93 .11 133 copper. Hard dense granite gneiss. Biotite, some or 4 100 Tr. notive les in freets. charite

DDH A-3 HOLE NO .---Form 33-32 (9-66) DIRECTION_ -900 PROPERTY CU- 34 INCLINATION. 6-12-70 LOCATION EMERALD ISLE ARIZONA EL PASO NATURAL GAS COMPANY COMPLETED _____ COLLAR COORD. N. ..... DIAMOND DRILL RECORD 3991 DEPTH . COLLAR ELEV. 22 OF 25 HCL SHEET --1"=4' NOTES BY___ SCALE CORE ASSAYS SLUDGE ASSAYS 0 GEOLOGY ROCK AND ALTERATION REC. SECTION SECTION 737 Native lu flakes along Hard, deuse granite. gueiss. Biotite, and biotite altered to chlorite. oxidized fracture planes. 90 .08 3 140 Many small fractures , Same. Limmite along fusctures. Relict pyrite. Tr. native Cu. 5 ,04 100 745 Same. Numerous hain-Native la on Aractures. Thin fractures. Limmite. .06 5 100 750 Hard, dense, fairly fresh Tr. native au on fractures. granite gneiss. Biolite and dilerite. 5 90 .07 755 Broken 755 - 756. Then At 156.5, native upper in crystal form. Dendritic dense and hard granite. xtal " m Gracture plane. .08 5 100 760 Hard, dense biotite granite Notice copper no fracts. Relief suldide vemilets. queiss. Some chlorite. Limmite, goethite(?). ح 100 .04 Some MinOz. 765 Same, fairly fresh but First sulfide show - 767 !! shows alterations along Very thin flakes CufeSz fracture plans. . , Ol and Fesz along fractures. 100 5 Limmite. 770

DIRECTION HOLE NO. Form 33-32 (9-66) - 34 INCLINATION PROPERTY EMINALD ISLE - 70 1-12 EL PASO NATURAL GAS COMPANY 1-9-70 AR COORD. N. PLETED. DIAMOND DRILL RECORD 8491 COL AR ELEV. 25 SCALE_ .OF__ SHEET _23 SBY CORE ASSAYS SLUDGE ASSAYS % 00 ROCK AND ALTERATION GEOLOGY REC. 7acu SECTION SECTION Badly altered & broken Much limonite, some 172 granite gneiss. TT2 chlorite. hemotite. ネリ 774 Same, Altered, but more fresh granite queiss. Some 4 100 02 Some limmite. 777 slickensides 775! Clay along seams. Some perphyritic 4 texture. '00 781 .12 strong oxidation zone. Relict sulfide stringers , 50 3 One small blev notice corper at 182'in fract. Possible water course 784 Zone. Fresh, more disritic ene Tr. dissem. Fesz in fresh 184-785, then altered 50 . کم عومر 3 nen oxidized, clayey zone - to TES': .04 F 80 80 759 Altored, strongly oxidized to 1/2 Venu Fesz, possibly some 790 zone. aFeSe. 741 C/2y 7.90-790.5. Broken granite greiss 193 dragments. 100 2 .04 Fesz along fracture at Altered grunite preiss 2 145 Biotite, cillorite. 100 194! sericite a talc. 1991 Feldspor altered. 100 2 Same. Vertical Limmite stain fracturing. Clay. 100 4 Nil. sol Partial pegmatite 802! Large gtz. & feldspar atals. Z 803 Clay zone at 803! 100 limonte

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

SCALE ______

DIRECTION. 1911 INCLINATION. 6-12-20 ETED 7-9-70 8491 HEL

DDH A3 10-34 HOLE NO .. PROPERTY malo ATION LOC AR COORD. N. AR ELEV

____0F___*ZJ* 

24 SHEET _

SLUDGE ASSAYS CORE ASSAYS % 90 ROCK AND ALTERATION GEOLOGY REC. SECTION VECU SECTION 806 Highly. altered, broken granite gneiss. Bistile, gon chilorite. Clay. 808 100 50 Some limmite on fractures. Sanie .02 810 Fairly fresh granite gueiss. Some pegmatitic lenses. Large feldspar git stali. 915 UN granite fragments. 818 .03 820 This clag zone 831 Gray gaciss zone at 820. Fault gruge 819.7! 823 Broken framents , 11guly attered granite gueiss. Same, more clay. ,01 Altered, but more solid 850 gravite gneiss. Limmite on fractures. 831 832 133 Same. 835 Altered, but solid, more fresh grimite gueiss. 139 Protite .03 840 Pegmiatitic - Seldspor stats.

つわみ A3 HOLE NO. DIRECTION. Form 33-32 (9-66) -0 INCLINATION PROPERTY 15/-STARTED ______. MANAD 70 LOCATION EL PASO NATURAL GAS COMPANY COMPLETED_ 79 -70 COLLAR COORD. N. DIAMOND DRILL RECORD COLLAR ELEV. DEPTH SCALE 1 = 4 25 OF SHEET ____ NOT ES BY SLUDGE ASSAYS CORE ASSAYS % Log ROCK AND ALTERATION GEOLOGY REC. SECTION SECTION DAY. Altered granite gueiss. 143 Pegmatitic- 342'. Same - somewhat barder core. This 84. 94arte stringers. ,15 Broken, altered granite Some limonite fragments. 849 T.D. 849'. 7-9-'70. RECOVERED 180' NXWL CASING FROM DOH A-S -LEFT 90' IN HOLE.

SCALE

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## EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

1-4'

DIRECTION_ 900 INCLINATION_ 7-14-70 STARTED ... COMPLETED 7-29-70 6131 DEPTH _ HLL NOTES BY_

HOLE NO. PROPERTY_ Emerain 15/2 LOCATION ..... COLLAR COORD. N. Ε.. COLLAR ELEV.

SHEET ______OF_____

ROCK AND ALTERATION	LOG	GEOLOGY	%		CORE	ASSA	YS			LUDGE	E ASS	AYS	
			REC.	SECTION	90. Cas				SECTION	3(4			
Allariam. Sand, grovel,	8.99 C.).	_											-
cobbies, & Louisurs. Granite	a. A	· _											_
gneiss, schist, giz, bioine,	34	-								.04			-
philogophie . Rock-Dit	0											·	-
Allurium. Sand, grivel, cobbles, & bouldars. Grinite gneiss, schist, gtz, biotite, phlogopite. Rock-bit 5 to 390! Cased to 390' with NXWL casing.	10	· · · · · · · · · · · · · · · · · · ·											
390' WITH NXWL Casing,	Ś	·									ŀ		_
Cored Cio 200,	NO:	-											-
- Recompred mily frag-	00	_								.04			_
- ments of bouiders in	5:0	_				•							
- Ments of bouiders in 10 corred above zones.	8.0	-											
<b>–</b>	50												
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	23												-
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Form 33-32 (9-66). EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD SCALE $\frac{1}{2} = 4^{1}$	DIRECTION						
		7.	CORE ASSAYS	SLUDGE ASSAYS			
ROCK AND ALTERATION	GEOLOGY	REC. SECTION	% Cu	SECTION 764.			
- Alluvium. Sand, gravel				.05-			
Fragments of granite,							
40 gneiss, schist, quarte, 30 feldspar, and pegmattie							
Flakes biotite and phlogopite mica. Clay lenses, Epidote.				.03			
lenses, Epidote. 45		-					
		_					
				.04			
50							
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				.04			
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SCALE

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

1"=4'

DIRECTION. 900 INCLINATION. 7-14-70 STARTED. 7-29-70 COMPLETED. 6131 DEPTH _ HCL NOTES BY_

ODH A-4 HOLE NO. CU-34 PROPERTY. EMPYALD <u>15/2</u> LOCATION-.Ε. COLLAR COORD. N. _

COLLAR ELEV. OF 18 3 SHEET ____

			%		CORE	ASSA	YS		SI	ASSAY	5	
ROCK AND ALTERATION	L06	GEOLOGY	REC.	SECTION	% Cu				SECTION	7.14.		
Alluvium. Sond, grovel, cobbles, and brulders, some clay lenses. Granite, gnoiss, schist, 75 quartz, feldspar and pegmatite. Biotite, phlagopite. Epidote.	0.										•	
cobbles, and boulders.	V	· _								.02		
Some clay lenses.	0	-										
Branile, gilliss, schist,		-										
75 and requisitie	Za	-										
Pintile philosopile.	Q	-										
Esilete	S.	-								.03		
Lpidole;	C.	-				•				.0		-
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Form 33-92 (9-66) •

SCALE_

EL PASO NATURAL GAS COMPANY

DIAMOND DRILL RECORD

,"=4'

DIRECTION_ 0 Q1 INCLINATION. 7-1-29-70 STARTED _ COMPLETED. 6131 DEPTH . HUL NOTES BY_

A 4 フカム HOLE NO. PROPERTY. EMIYOD 15/2 LOCATION_ COLLAR COORD. N. Ε. COLLAR ELEV. .0F_ SHEET ___

ROCK AND ALTERATION	GEOLOGY	%		CORE	ASSA	YS	SI	LUDGE	ASSAY	s
		REC	SECTION	90 Cu			SECTION	2614.		
- Alluvium. Sond, gravel, cobbles, - and brukkers.		-								
-grovel, coubles,		-						.03		-
- and bruilders.		-								-
In Granite, gneiss,		4								-
110 Granite, gneiss, schist, quarte, feldspar, and pegmatite fragmonts. Epidote. (lay, biotrie, 115 philogepite.		╫	+							
- feldspar, and										
pegmatite frequients.	0 8							.04		
Epidoten biotile.										
115 phloacoite.	No.									
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Form 33-32 (9-66)*	DIRECTION				E NO.	Y	102	24			
EL PASO NATURAL GAS COMPANY	STARTED		and the second se			COORD.		YA/	0 /	5/2	
DIAMOND DRILL RECORD	COMPLETED 6/3/			COL	LAR E	ELEV				E.,	
SCALE 11= 41	NOTES BY HCL			SHE	ET	5		_0F	18		
	GEOLOGY	*			ASSA	YS		SI	UDGE	ASSAYS	
	GEOLOGY	REC.	SECTION	% Cu	/			BECTION	9014,		
Alluvium. Sand, gravel, cabbles, and brulders. Granite, gnciss, schist, quartz, 150 feldspar, and pegmatite fregments. clay, biottie, and phlogopite. Epidote.	-										
gravel, cabbles, and D	-	4				1			.02		
brulders. Granile,	-	4						-			
gneiss, schist, quariz,	-	-									
150 feldspare and	-	╂					┢				<b>+</b>
- pegmatite frogments,		┨									
- clay, biotite, and	-	-							.03		
- phlogopite. Epidote.	-	1									
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HOLE NO. DDH A-4 DIRECTION_ Form 33-32 (9-66) . INCLINATION ______ PROPERTY_ STARTED 7-14-10 LOCATION EMERALD ISLE, ARIZONA EL PASO NATURAL GAS COMPANY COMPLETED 7-29-70 COLLAR COORD. N. DIAMOND DRILL RECORD E. . 6131 COLLAR ELEV. DEPTH __ SHEET ______OF___18 HGL 1"=4' NOTES BY_ SCALE_ CORE ASSAYS SLUDGE ASSAYS % Log ROCK AND ALTERATION GEOLOGY SECTION % REC. SECTION % Allunium. Sand, gravel, cobbles, and boulders. .OZ <u>185</u> Granite, gneiss, schist, quartz. - clay, biotite and phlogopite mica. Epidote. .02 190 . 03 195 .03 200 .03 205 .02 210 .04 215

Form 33-32 (9-66) EL PASO NATURAL GAS COMPANY		DIRECTION INCLINATION90 ° STARTED7-14-70			HOLE NO PROPERT LOCATIO	гчС n <i>ЕМЕ</i>	U) Rh	-34- PD 15	LE, s	513,9	ON1	9
DIAMOND DRILL RECORD		COMPLETED <u>7-29-7</u> DEPTH <u>6/3</u>	0	•	COLLAR	FIEV				E		
scale_/"=4'		NOTES BY_HLL			SHEET	7		OF	18			
	90	GEOLOGY	%		CORE ASSA	YS			UDGE		1YS	
ROCK AND ALTERATION				SECTION	10 cu			SECTION	% cu			
Alluvium.	GF	usion reported in sludge. Probably minoralized Grag- ment or lense in alluvium							.08			
- LAZANIENTS CHANILE	30/3/~7	No CusiOz visible -	50	2								
220 quartz, feldspar. Clay, biotite, philogopite. Some	NO ON	immite and hematite -						-				
	E Sta	long fractures	30	5					.08			-
-		· -										
Same	00200	Same,	30	5					.12			
230 Rotary drilling Allusial sand, gravel, coboles, &	REAL	inimite and liematite				-						 
boulders, Granite, gte. Epidote.	LATEN.	-							.06	,		
235 Same		-										
- duile	SULLAN	-							,05			-
240		-										
S zne	0.00								.06			
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52.ne 250	0,30,30								.08			

_____U

SCALE

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

1"=4'

DIRECTION. -900 INCLINATION. 7-14-70 STARTED. COMPLETED 7-29-70 6131 DEPTH_ 406 NOTES BY___

TT

HOLE NO. DDH A-4 PROPERTY CU-34 LOCATION EMERALD ISLE ARIZONA COLLAR COORD. N. Ε.

 COLLAR ELEV.
 SHEETOF8

										E ASSAYS			
	ROCK AND ALTERATION	LOG	GEOLOGY	REC.	SECTION	10 hu				SECTION	% in		
	Alluvium. Sand, gruvel cobbles, boulders, Grunite quarte, gneiss, sobist, Biotite & phlogopite 255 mica, Epidote.	10:01 M	- - -								.10		
		21.100 CT		-				-			.08		
	260 Cored 260-265'. 262 Alluvium. Granite and gneiss Frag- ments, some quartz.	Der Co		75	2								
	and gneiss prog- ments, some quartz. 265	CONTRACT		17	£						.06		-
	- Alluvium. Sand, gravel, boulders.	51-50 CO 19									.04		
	<u>270</u> 	0.0000									.06		-
	52me. 275	5 2000											
-	- - - 260	Start Contract									.09		
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HOLE NO. DDH A-4 Form 33-32 (9-66) INCLINATION _____ 900 DIRECTION_ au-34 PROPERTY_ LOCATION ENERALD ISLE ARIZONA STARTED ______7-14-70 EL PASO NATURAL GAS COMPANY COMPLETED 7-29-70 COLLAR COORD. N. DIAMOND DRILL RECORD 6131 COLLAR ELEV. ----DEPTH_ SHEET _______ OF_____ NOTES BY HLL SCALE _____ = 4' SLUDGE ASSAYS CORE ASSAYS % Lo G REC. SECTION % GEOLOGY ROCK AND ALTERATION SECTION U - Alluvium. Sond, gravel, boulders. Granite, grieiss 200 schist, 4 quante. Some clay. Biotite and phlogo-pite mica Epidote, .09 .13 295 ,23 300 .19 305 .18 310 ,25 315 .30 320

JDH A-4 HOLE NO.__ Form 33-32 (9-66) DIRECTION_ INCLINATION - 900 au-34 PROPERTY_ LOCATION ENERALD ISLE, FRIZONA 7-14-70 EL PASO NATURAL GAS COMPANY STARTED_ COMPLETED 7-29-70 DIAMOND DRILL RECORD COLLAR COORD. N. F 6131 DEPTH_ COLLAR ELEV._ _OF____18 SCALE _ /" = 4' HCL SHEET ______ NOTES BY_ CORE ASSAYS SLUDGE ASSAYS % Log GEOLOGY ROCK AND ALTERATION SECTION % REC. SECTION % Allyvium. .22 323 Corred 323-329! 325 Alluvium. Sand, г 90 grovel, cobbles and boulders. Growite, epidute. Slight ansolidation. . 15 4 محار ZJ 329 Alluvium, Some .17 335 .10 340 Alludium . 99 345 ,09 350 .10 محكك

Form 33-32 (9-66) EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD	DIRECTION INCLINATION90° STARTED7-14-74 COMPLETED7-29-7 DEPTH6131	2 7 ()		PRO LOC COI	DPERT CATIO	N <u>ERI</u>	<u>(u)</u> <u>EE</u> D. n	A- - 34 915 1	SLE,	<u>ARI</u> _E	201	IR 	
SCALE = 41	NOTES BY HCL			•	ET	. /		OF	18				
ROCK AND ALTERATION	GEOLOGY	GEOLOGY REC. SECTION						SLUDGE ASSAYS					
Alluvium. Sand, gravel, cobbles and brulders, Granite, gneiss, schist, quartz, epidote.			SECTION	^r Cu				SECTION	.06				
360					•				.10				
365 - Some - - - 370	  								.08				
375									.10				
Søme. 380									.11				
	Black Mindz as comenting								.13			-	
- <u>TOP</u> <u>GILA</u> <u>CONG.</u> -383' Well-cemented conglo- <u>385</u> merste. or paite, quartz be guess, epidate fragmonts Some silty, sandy lenses. <u>Biothe</u> and philogophic <u>383</u> mica. <u>52me</u> . <u>390</u>		100		.]9									

DDH A-4 HOLE NO. Form 33-32 (9-66) - 900 Cu-34 PROPERTY. 7-14-70 ION EMERALD ISLE ARIZONA EL PASO NATURAL GAS COMPANY ETED 7-29-70 DIAMOND DRILL RECORD COORD. N 6131 HCL ıZ 1"=41 OF. NOTES BY_ SHEET SCALE_ SLUDGE ASSAYS CORE ASSAYS 90 ROCK AND ALTERATION GEOLOGY SECTION % REC. SECTION Gila cong. Fairly is MnOz, hematile and well cemented. Epidote. limonite staining. 90 4 No au visible 394 .25 Same. 5 190 . Granite boulders Sandy, siliy lense - 399. Some 6-0" bouiders of granite. White day with 4 100 silt. <u>403</u> .23 Gila ung. Grmitic Mille mineralizations bourseps. around fragments. Tale or Kaplin clay. 100 5 Limmite. 403 Epidotized boulder No Caloz. Same. Nil 5 30 413 Large granitic boulder 413-415.5! 5 .14 100 Fairly strong MNOZ ÷18 Gila cong. White violitte limmite stain. - Kaolin clay and No au visible .14 - silt commenting 5 100 angular and rounded 423 fragments. Green epidate staining

EL PASO NATURAL GAS COMPANY DIAMOND DRILL RECORD

SCALE ______4

DIRECTION_ INCLINATION - 922 STARTED _______ COMPLETED 7 - 29 - 70 DEPTH ______6/3 / HCL NOTES BY____

HOLE NO. DDH A-4 PROPERTY <u>CU-34</u> LOCATION <u>ENERPLD</u> ISLE <u>PRIONIA</u> COLLAR COORD. N. Ε... COLLAR ELEV. SHEET ______ OF_____ IB

	U		%		CORE		YS	s	LUDG	E ASS	AYS	
ROCK AND ALTERATION	2	GEOLOGY	REC.	SECTION	% au	,		SECTION				
Gila cong. Altered	in the second se	· · · · · · · · · · · · · · · · · · ·	100		.25	·						
427 granite cobble	3	-										
	0	· -										-
- Tan siltstone on poorly cemented sondstone.	04	Irregular blebs and -										-
Cemerilea Sandstone.	Nº.	stringers MnOz thru		5								-
Few growned 2/50.	0	eltetore -	100	5	.27							
- Some grovel 2/50. - Soft when cored, hordons	10	1 (3()-										
432 when dried.	5	No Ca 203 -										٦
	8	-						2				1
- Same	K											-
-	10	Less Mildz										-
	E	No au visible _	100	5	.18							4
	5	· _										
437	60	_		-								
- Altered, broken Gila	60											
- Milerea, procen old	0.1	-										1
- conglomerate. Granite or diorite brudder.	535	limonite some Nuch			.20							4
Some epidote, Clay.	[ŝ	No Calloz	96	5								-
Jonie Epidore, Clag.	0											4
442	SP.											
Cila ena Eurota	ß											
- Gild Corrige Oranie	Q						-					1
- gnelss usurder nit	N. A.	MINDZ, MIMMILE		~	.27							1
- gray clay ane. Allered.	57	No Calloz	100	5	121							-
- Gila cong. Granite gneiss boulder in gray clay zone. Altered. Kaolin or tale.		No Car disible _										4
447	34		ļ									4
- Same	1,0	Same										
	J.											
T	44	-	100	4	. 36							1
	0	_										1
451 Soft, sandy lense.	1/2	-		,								-
Altered, broken	V.	Mall etsiming	100	/	·							-
Altered, brokens 454 451-455' Clayey.	1.5	11/11/2 5/21111-5-		2								-
454 4512450 . Clogeg.	6.4	Some Immente.	100	2								
455	195	No Qu visible	103	1								
Highly attered	R	-			,23							1
+ Highy and Leves.	No.	-		2								-
gravite boulders	5		100	3								-
458 Feldspar altered		Commite and Muloz.										4
to clay - Kaolin(?)	SZ.	Commute and Muloz. No CaCO3										_
Pegmatitic	10											
					L			 				

DDH A-4 HOLE NO. Form 33-32 (9-66) DIRECTION INCLINATION ______ <u>CUL - 34-</u> PROPERTY_ LOCATION ENERBLD ISTE ARIZONA EL PASO NATURAL GAS COMPANY COMPLETED 7- 29- 70 LAR COORD. N. DIAMOND DRILL RECORD 6131 DEP COLLAR ELEV 14 _OF_1R 1201 SHEET _ NOTES BY____ 1"=4' SCALE_ CORE ASSAYS SLUDGE ASSAYS ROCK AND ALTERATION REC. SECTION % GEOLOGY SECTION Gila angiomerate. Linimite and MnOz. Silty sandy lenses with gravel & guanite abbles. - Clay. Altered. 465 No Cu visible. 70 7 .22 Same. Tale or MnOz costing pround_ granite Aragments. sericite day. .11 75 4 469 Andesite boulder 469-470' MnOz Slickensides. 100 5 Episate stain. ,08 Granite 471-472 474 Brokow, altered. limmite. No cusioz. Sila cong. Granite fragments in coarse Mnoz, limmite. granitic sand. White .09 5 100 clay 477-479! Tan, silty, sandy. day coment, Granite of Little Minda as fragments. Earthy adores stringers. 5 .12 100 No CuSiOz. No Caloz. 434 Same, with more coarse material. Granite fragments. More Minoz 6 .05 10 Gilà conglomerate, but becoming a more Miloz, little limonite. arkosic sand with 5 100 .12 No Casioz. granite fragments. 495

DDH A-4 HOLE NO. Form 33-32 (9-66) DIRECTION. -900 al-34 PROPERTY_ INCLINATION. 7-14-70 LOCATION EMERALD ISLE ARIZONA EL PASO NATURAL GAS COMPANY COMPLETED 7- 29-70 AR COORD. N. DIAMOND DRILL RECORD 6131 COLLAR ELEV. DEPTH HLL _0F____ NOTES BY_ 1=4 SCALE SLUDGE ASSAYS CORE ASSAYS % ROCK AND ALTERATION 8 GEOLOGY REC. SECTION % SECTION - Arkosic Gila cong. Fair MNOZ - Coarse granitic . Fair Minuz sand with granite Some limonite. 80 5 .06 fragments. little ANO CUSIO3. 500 epidote. Same, Some tans silty sand lenses, Same, No CaCO3 100 5 .05 505 - 57me, 507 100 2 - Ar-Kosic Gila cong. Some granite frag-Site Min Dz and mants. Slickensides limmite. No Caloz 33 6 :08 Sericite, on talc seinis or visible Cusidz. Some silty lenses. 513 Epidote, TOP GRANITE - 513 Altered mica gneiss or schist 513-514! 3 66 516 Clayey. Altered granite gneiss Some limonite on .09 Biotite and dilorite. Suschires. Few Clay along fractures. specks hematite. 5 90 Stickensides 519! 521 Highly altered and Frin MnOz in fractures 100 2 523 precciated granite gneiss, Chlorite. 3 67 .05 Same, very 528 altered. Childrite 2 or spidote staining. Je Muloz and limonite. 100 2 40 530

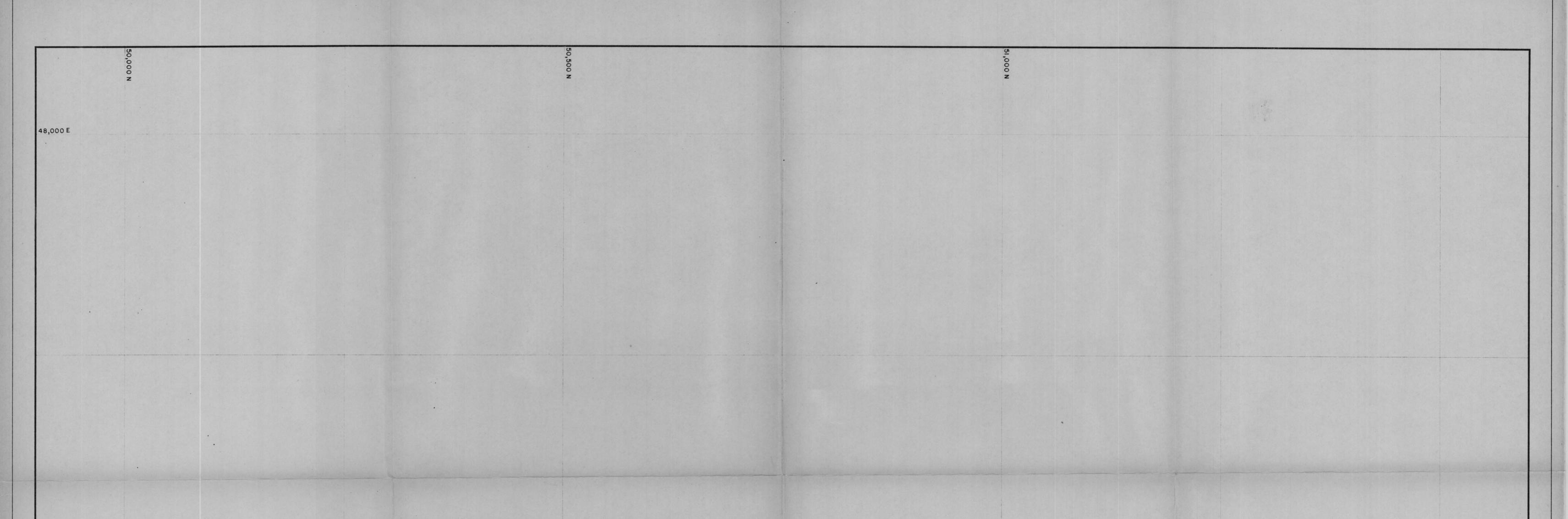
DOH A-4 HOLE NO .. Form 33=32 (9-66). DIRECTION. -900 - 34 INCLINATION_ PROPERTY_ LOCATION ENERALD ISLE, ACIZONA 7-14-70 EL PASO NATURAL GAS COMPANY STARTED __ COMPLETED 2-29 - 70 DIAMOND DRILL RECORD COL LAR COORD. N. 613' DEPTH COL AR ELEV HCL OF 111=41 NOTES BY. SCALE_ CORE ASSAYS SLUDGE ASSAYS % ROCK AND ALTERATION GEOLOGY REC. SECTION 0/3 SECTION Altered gramite gneiss. Relict sulfide venilets Biotite altered to chlorite. High-angle in fractories. Limonites 100 5 Tr. MNDZ. Stacturing . 535 3 Same, 533 100 Z Sandy zone 540-541. MnOz along Anactures. 90 Some Muirmite. Many thin relict suifide venikets. - Altered granite 543 gneiss. Biotite & 3 chilmite . 4 75 Same. 541 Very strongly attered granite gneiss. Soft, friable. Little Minde on fractures 90 ą. 551 Same to 559', Some limmite & MnOz: 72 5 556 Very soft and brokens <u>559</u> 558 *8*3 3 - plore fresh granite gueiss. More biotite nuca. Slickensides with Some limmite. 4 180 563 clay - Kaolin(?)

DDH A-4 HOLE NO. Form 33-32 (9-66) DIRECTION -900 Cu-34 PROPERTY___ INCLINATION. 7-14-70 LOCATION EMERALD ISLE PRIZONAR STARTED. EL PASO NATURAL GAS COMPANY COMPLETED 7-29-70 COLLAR COORD. N. __ DIAMOND DRILL RECORD 6131 COLLAR ELEV. HCL _____OF___ |"=**4**1 NOTES BY_ SHEET .. SCALE_ CORE ASSAYS SLUDGE ASSAYS - ROCK AND ALTERATION GEOLOGY SECTION 00 Cal REC. SECTION Altered biotite granite 4 100 Limmite. 567 gneiss, Steep Fracts. Same, with rertical fracturing - clay no 570 fracture faces. 3 Limonite in fractures Same. 4 100 514 Altered, but, fairly solid gramite queiss, 517 Biotite and childrite. Limmite nu fractures. 3 120 Also MIDZ Very strongly altered brecciated granite gneiss to 530. MINDZ devidentes along fractures. Limmite. 100 4 581 From 580-585' is altered. fine grained dike. Thin Dike has numerous lense granite 584! thin MnOz stringers 75 4 throughout. Also limmitic stained. 585 Altered granite greess. 587 Biotite 4 childrite. 100 2 Limmite on fractures. Same, but nive fresh, granite guciss to 5.92 4 80 591 Highly preceisted, 100 3 Mnoz along fractures,-594 altered granite gneiss. Limmite. 100 2 596 Same, Few quante or pegmatitic veinlets q. Limmite. 100 600

DDH 17-4 Form 33-32 (9-66) DIRECTION HOLE NO. -90° Cu- 34 PROPERTY_ INCLINATION. ATION ENERALD ISLE 7-14-70 ARIZONA EL PASO NATURAL GAS COMPANY STARTED. LOC 7-29-70 DIAMOND DRILL RECORD COMPLETED_ AR COORD. N. co 6131 DEF cοι AR FLEV 1=4' SHEET . IR 0F NO' ES BY SCALE SLUDGE ASSAYS CORE ASSAYS % ROCK AND ALTERATION Log GEOLOGY SECTION % CU REC. SECTION Altered, breccisted MnOz, limmite staining: granite gneiss. Biotile, chlorite, 603 High-angle Structuring. 83 3 3 61 606 Dendritic MinOz. Same, 3 95 609 Numerous thin fractures sulfide and manganiterous 100 4 seinters. 613 - T.D. 613! JULY 29, 1970. RECOVERED 250'NXWL - CRSING FROM A-4. LEFT 140' IN HOLE,







48,500 E		
	A A	
49,000 E		

