C 383

PACIFIC PROPERTY

1982 GEOTECHNICAL STUDY

SE¼, NE¼, SE¼, Sec 14, T6S, R98W

HOLE NO. DH8

DATE DRILLED 7/21/82 - 8/23/82

COORDINATES 629,860 NORTH 1,213,454 EAST

SURFACE ELEVATION 7,936.4 FEET

TOTAL DEPTH 1,942 FEET

CORED INTERVAL 590 - 1,942 FEET

LENGTH AND DIAMETER OF SURFACE CASING 16' x 6-7/8"

SIZE OF CORE 3"

CONTACT: UINTA - GREEN RIVER FORMATIONS 268 FEET

KEY BEDS	DEPTH	ELEVATION	ELEVATION RELATIVE TO MM
UPPER WAVY BED (BASE)	649.9	7,286.5	+69.6
A-GROOVE (BASE)	700.3	7,236.1	+19.2
MAHOGANY MARKER (TOP)	719.5	7,216.9	0
B-GROOVE (TOP)	799.0	7,137.4	-99.5
R-6 ZONE (TOP)	816.0	7,120.4	-96.5
R-5 ZONE (TOP)	1,072.0	6,864.4	-352.5
R-4 ZONE (TOP)	1,194.0	6,742.4	-474.5

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/23/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		590					590.00' to 593.70': Oil shale, low grade, light brown and light gray, thin laminations, small tuffaceous lenses at 590.82' and 590.87'
		591					
		592					
		593				.29	593.70' to 595.20': Oil shale, high grade, dark and dusky yellow brown and black.
		594					
		595					595.10' -Tuff, 1" thick, irregular lamination, orange and black. 595.20' to 597.92': Oil shale, low grade, thin bands of light brown and light gray.
		596					
#1	100						
		597					597.80' - Tuffaceous lenses, orange and black.
12.93 / 13.00							
		598					597.92' to 599.33': Oil shale, very low grade, very pale orange and light gray.
		599				.75	599.33' to 608.50': Oil shale, medium to high grade, medium brown and black, thinly laminated, some irregular (wavy) laminations.
		600					
		601					
		602				.75	
93						.93	
		603					603.45' - Irregular tuff bed, sandy, orange, and black, 1-2" thick. 603.67' - Tuff, irregular, 1/4" thick, orange and black. 603.75' - Tuff, irregular, 1" thick, orange and black. 604.38' - Tuff, orange and black, some shale interlamination. 606.55' - Tuff, 2" thick, orange and black, calcareous, disseminated sulfides.
		604					
		605					
		606					
		607					
		608					608.50' to 613.10': Oil shale, medium grade, medium brown. 608.93' - Tuff lens with blebs of massive sulfides. 609.58' - Tuff bed, 3" thick, orange and black, with minor disseminated sulfides.
		609					
#2	100		.50				
		610					
20.11 / 20.00							
		611					
		612					
		613					613.10' to 615.30': Oil shale, high grade, dark yellow brown with some black interlaminations.
		614				.85	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/23/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		615					614.68' - Tuff lens, 1/2" thick, orange and black.
		616					614.79' - Tuff bed, irregular 1" thick, orange and black.
		617					615.00' - Tuff bed 0.23 thick, irregular laminations, white mineralization
		618					615.30' to 647.42': Oil Shale, low grade, ver pale orange and light gray, thin laminations.
		619					615.47' - Tuff, 1/2" thick, orange and blac
		620				.00	618.83' - Tuff band, 1/8" thick, irregular band, orange, black and white.
		621					619.00' - Tuff, irregular 1/4" band, orange black and white.
		622				.70 .20	619.55' - Tuff, irregular 1/4" band, orange black and white.
.04		623				.04	623.7' - Tuffaceous bed, 0.05' thick 623.95 - Tuff bed, 0.06' thick, irregular.
		624					
		625					625.55' to 625.77 - Irregular tuff bed, dark brown and medium gray, wavy laminations.
		626					
		627					
		628					628.60' to 629.2' - Irregular organic beddi
		629					629.86' - Tuff, 1/2" thick, orange and blac some disseminated sulfides.
		630					630.15' to 630.20' - Tuff bed, orange brown and black, irregular shape.
		631					631.90' - Tuff, 1/4" thick
#3	100	632					
19.90 / 20.00		633					633.88' - Tuff bed, 1/2" thick.
		634					
		635					635.40' - Thin bed of massive sulfides
		636					636.41' - Irregular tuff bed
		637					637.40' - Irregular tuff bed.
		638				.20	
		639					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/23/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		640					
		641				.17	641.72' - Thin lenses of massive sulfides.
		642				.19 .37 .94	
94		643					
		644					
		645				.00	645.10' - Clay zone with some deformation, 0.10' thick.
		646					
		647				.42	647.42' to 649.90': Upper Wavy Bed, contorte and irregular lamination due to soft sediment deformation.
		648					
		649					649.90' to 690.00': Oil Shale, medium to low grade, medium brown and light gray, hard, den and competent.
		650					High grade zones at 677.40' to 678.80', 684.35' to 685.15', and 687.70' to 688.65'
		651					
#4	100	652					
20.06 / 20.00		653					
		654					
		655					
		656					
		657					
		658					
		659					
		660					
		661					
		662					
00		663				.00	
		664					

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/24/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		665				.52	
		666					
		667	.33	.33			
		668				.88	
		669		.72		.50	
		670					
		671					
		672					
		673				.39	
#5	93	674					
19.97 / 20.00		675					
		676					
		677					
		678				.46	
		679					
		680				.96	
		681					
		682				.67	
97		683				.93 .98	
		684					
		685					
		686					
		687					
		688				.17	
		689					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/24/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		690				.11
		691				.40 .56
		692				.89 .98
		693	4 Total			
		694				
#6	95		.47 .51	←Shaley		
19.96 / 20.00		695		.36 .71		.52 .94
		696				
		697				
		698				
		699				.19
		700				
		701				.08
		702				.11 .34 .93
✕ 93		703				
		704				.92
		705				.12
		706				
		707				
		708	.29			
		709				
#7	97	710				.17 .65
19.93 / 20.00		711				
		712				.90
		713				.53

LITHOLOGIC DESCRIPTION

690.00' to 700.35': A-Groove, oil shale, low grade, laminated with some multiple partings along some laminations. With the exception o the zones of partings, the material is very hard and competent.

700.35' to 710.00': Oil shale, mostly medium to high grade, laminations very evident due to contrasting grades. Tuff beds are common, with some contortion of laminae near the tuff beds.

702.15' - Tuff bed.

704' to 705.05' - Tuffaceous zone.

705.47' to 705.75' - Dark brown, very distinct tuff bed.

709.44' to 709.68' - Tuffaceous zone in high grade material.

710.00' to 719.55': Oil shale, mostly light brown, low to medium grade. Material is very hard.

710.65' - Tuff bed
712.60' - Tuff bed
712.75' - Tuff bed

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/25/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	C.I.	LITHOLOGIC DESCRIPTION
		714					
		715				.91	
		716					
		717				.40	
		718					
		719					719.55' to 720.00': Mahogany Marker. Light gray, tuffaceous, friable. Minor tar present.
		720				.87	
						.32	720.00' to 730.00': Oil shale, low to medium grade, light to dark brown. Material hard and dense.
		721		.22 .70			
		722				.49	
.86		723				.86	730.00' to 738.70': Mahogany Bed. Oil shale high to very high grade, very dark brown to black, laminations very evident. Highest grade zone about 732.00 to 733.00 feet.
		724					
		725					
		726					
		727					
		728					
#8	98					.03	728.00' to 728.15' - Tuff bed.
9.85 / 9.62		729					
		730	.60 .63 .74	Well defined		.0	
		731				.98	
		732				.34 .70 .94	
.71		733				.03 .70	
		734					
#9	100						
10.51 / 10.38		735					
		736					
		737				.40	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/25/8.

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		738					738.70' to 754.40': Oil shale, mostly medium grade, some higher grade at 747.63' to 748.57' and from 750.70' to 751.00'. Hard and competent.
		739				.13	
		740				.29	
		741					
		742					
		743				.15	
22						.58	
		744					
		745					
		746					746.87' to 746.93' - Tuff bed.
		747					
#10	99						
19.99 / 20.00		748					
		749					
		750					
		751					
		752					
			.52				
		753				.20	
						.49	
		754				.92	754.40' to 755.90': Nahcolite, black to dark brown, tabular crystals, some evidence of leaching by drilling, no evidence of leaching by groundwater. Probably represents a pod or lens.
		755				.35	
		756					755.90' to 771.18': Oil shale, medium grade, light to dark brown, hard, dense and competent
		757				.42	
		758					
		759				.75	
		760					
		761					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/26/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		762		.40 .62		.62
		763				.21 .52
21						
		764				.42 .81
		765				
		766				
		767	.40 .80			
		768				
		769	.23			
		770				.42
		771				.38
#11	92	772				
20.12 20.00		773	.31 .48			.63
		774	.20 .59	.2 Healed 1/32" displacement		
		775	.30 .48	.3		
		776				.06 .10
		777				.18 .59
		778				.84
		779	.14 .22 .33			
		780				
		781				.54
		782				.63 .72
33		783	.34 .38	←Tarry		.12 .54 .85
		784				.33 .54
		785	.88	.30 .45 .90 Healed		.18 .48

LITHOLOGIC DESCRIPTION

771.18' to 772.08': Oil shale, medium to high grade, dusky yellow brown, thinly laminated with pale yellow brown. Hard and competent.

772.08' to 773.10': Oil shale, low grade, pale yellow brown, hard and competent.

773.10' to 775.58': Oil shale, very low grad very pale orange.

775.58' to 779.12': Oil shale, low to medium grade, light brown, hard and competent.

776.06' - Tuff, brown, 0.06' thick.

777.35' - Tuff, dark gray, 0.22' thick disseminated sulfides (pyrites).

779.12' to 779.96': Oil shale, high to very high grade, dusky yellow brown and black. This zone tends to break along bedding planes

779.96' to 783.35': Oil shale, medium to low grade, light and dark brown, thinly laminated hard and dense.

783.35' to 784.75': Oil shale, high to mediu grade, tarry ooze along parting plane.

784.75' to 785.85': Oil shale, medium grade, light and dark brown.

785.85' to 787.10': Oil shale, low grade, very pale orange and light brown.

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/26/8:

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		786	Healed	?12 1.00	Healed	.26 .69
				.47		
		787		.22		.13 .73
		788				.33
		789				.00 .37 .50
		790				
		791				.23
		792		.22		.12
		793				.32
#12	70			.70		.43 .67 .99
20.01 / 20.00		794		.30 .46 Healed		
		795				.00 .61
		796		.02 .59		.08 .43
		797				.12
		798		.85		
		799			Healed	.75
				.90		
		800		.85		.59
		801			Healed	.09 .61
				.73		.76
		802	.40			
		803				
34						.02 .53
		804				.21
		805				.34 .45
		806		.30 (.77)		.77 .98
		807		Healed		
		808		(.90) .35		.90

LITHOLOGIC DESCRIPTION

787.10' to 788.35': Oil shale, medium grade, with thin laminations of dusky yellow brown and black, hard and competent.

788.35' to 789.83': Oil shale, high grade, bedding dips N 15 degrees, dusky yellow and dark yellow brown, hard and competent.

788.60' to 789.05' - Gray tuff, siliceous with thin undulating siltstone laminations

789.83' to 799.00': Oil shale, medium grade, light and dark brown, hard and competent.

799.00' to 816.50': B-Groove. Oil shale, lo to very low grade, very pale orange and light brown, hard and competent.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/26/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	C.I.	LITHOLOGIC DESCRIPTION
		809		.05 .47			
		810		.40 .76 .95 .30			
		811					
		812				.40	
		813					
#13	79					4 Total	813.40' to 814.60' - Very vuggy, undulatir laminations, euhedral to anhedral pyrites and other sulfides. Calcareous.
20.13 / 20.00		814				.24	
		815	.25			.90	
		816		.00 .28 Healed .58 .95 Healed		.58	816.50' to 821.05': Marlstone, light gray, hard and competent, occasional thin shaley laminations.
		817				.32 .94	
		818				.04 .37	818.37' to 819.61' - Very vuggy, undulatir siltstone laminations, tar (kerogen) filled vugs are common, euhedral to anhedral pyrite and sulfides, veinlets and disseminated.
		819				.61	
		820					
		821				.22	821.05' to 821.77': Oil shale, high grade, dusky yellow brown and black, thinly laminate
		822				.46	821.77' to 843.53': Oil shale, medium grade, light and dark brown, hard and competent.
47		823				.47	
		824					824.27' to 824.41' - Tuff, wavy bedding, gray, orange with some white mineralizatic
		825					
		826				.10 .78	826.10' to 826.27' - Light brown tuff on fine-grained sandstone.
		827	.97				826.78' to 826.90' - Gray tuff.
		828				.79	828.56' to 828.79' - Calcareous, fine-grained sandstone with some sulfides at the base.
		829	.49				
		830				.69	
		831					831.69' to 831.84' - Dark gray tuff bed.
		832					
		833				.88	833.84' to 833.88' - Thin gray and orange irregular tuff.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/26/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		834					
		835					835.01' - Irregular dark gray tuff with some calcite, 0.04' thick.
#14	95						
		836					
20.06 / 20.00						.31	
		837					837.51' - Irregular wavy dark gray tuff, 0.16' thick.
		838					
				.08	← Healed		
		839		.25		.71	
			.60				
		840	.22	.15		.32	
			.36				
		841	.95	.36		.36	
						.92	841.14' - Black and white peppered tuff, 1/8" thick.
		842					
			.53				
		843	.80				843.14' - Tuff, dark gray, 0.02' thick. 843.85' - Gray tuff, 0.35' thick.
×53							843.53' to 850.20': Oil shale, low grade, very pale orange interbedded with light gray marlstone; high grade zone at 847.41' to 847.63'.
		844				.06	
		845					
		846					
		847				.36	847.63' - Tuff, wavy laminations, orange and gray, siliceous, 0.28' thick.
		848					
		849					
		850				.81	850.20' to 851.12': Oil shale, medium to high grade, thin laminations of dusky yellow brown, dark brown and light brown.
		851					
#15	93					.65	851.17'- Wavy black tuff, 0.06' thick.
		852					851.12' to 851.87': Oil shale, medium to low grade, dark and light brown and some light gray.
19.98 / 20.00				.73			
		853			Calcite Silica Iron	4 Total	851.87' to 856.15': Oil shale, low to very low grade, light brown, light gray and very pale orange with occasional thin bands of dark brown oil shale.
		854					
				1.10		.53	
		855					
		856				.20	856.15' to 859.55': Oil shale, medium grade, with irregular wavy laminations, light and dark brown.
						.73	
		857				.93	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/27/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		858				
						.45
		859				
		860				
		861				
		862				
						.04
		863				
*51				.38		.12
		864		.51		.51
						.12
						.27
		865				.88
			.24			.10
			.32			.65
		866				
		867				
						.95
		868				
#16	92					
						.98
19.73		869				
20.00						
		870				
						.75
		871				
						.52
						.97
		872				
				.72		.62
						.98
		873				
						.41
		874		.95		
						.55
		875				
						.15
						.97
		876				
						.45
		877				
		878				
		879				
		880				
						.06
		881				
						.50

LITHOLOGIC DESCRIPTION

859.55' to 859.88': Oil shale, medium grade, with wavy lamination

859.88' to 860.17': Oil shale, low grade

860.17' to 860.44': Oil shale, medium grade, dark yellow brown wavy laminations.

860.44' to 866.60': Oil shale, low grade, very pale orange and light brown.

866.25' - Kerogen oozing tuff, black, 0.06' thick.

866.60' to 867.68': Oil shale, medium grade, dusky yellow brown with occasional thin black laminations.

867.68' to 869.32': Oil shale, medium to low grade, mostly light brown with thin dusky yellow brown laminations, hard and competent.

869.32' to 869.88': Oil shale, high grade, thin black laminations with dark brown.

869.88' to 871.82': Oil shale, very low grad very pale orange with thin black and dusky yellow brown laminations.

871.82' to 878.95': Oil shale, low grade, some dark brown laminations, mostly very pale orange and light brown. Thin laminations and irregular blebs of pyrite and sulfides are common.

878.95' to 879.60': Oil shale, medium grade, light, dark and dusky yellow brown.

879.60' to 880.55': Oil shale, high grade, black with thin bands of very pale orange.

880.55' to 881.66': Oil shale, low grade, very pale orange.

881.66' to 883.05': Marlstone, light gray, hard and dense.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/27/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		882				.55
		883		.40		.25
24				.92		.92
		884		.45		.45
				.92		.67
		885		.01		.16
				.85		.30
		886				.77
						.25
		887				.37
#17	90		.45			.73
20.01 / 20.00		888				.68
		889				.49
		890				.88
		891				.49
			.74			
			.81			.70
		892	.87			
						.94
		893				
		894				.36
		895				
		896				
		897				
		898				.80
		899				
		900				.05
		901				.26
						.33
		902				.34
25		903				.25
		904				.98
		905				
		906				.66

LITHOLOGIC DESCRIPTION

883.05' to 883.55': Oil shale, high to medium grade, dusky yellow brown.

883.55' to 886.85': Marlstone, light gray, wavy laminations, some inclusions of sandstone lenses.

886.85' to 888.87': Siltstone, light brown, hard and dense.

888.87' to 897.00': Oil shale, mostly low grade with some wavy laminations. Higher grade zone at 892.60' to 896.08'.

897.00' to 907.86': Marlstone, light gray to light brown, laminated, hard and competent

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/27/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		907		.14 / .35	Healed	.95	907.86' to 920.75': Marlstone, silty, light gray, laminated, slightly absorptive, hard and competent.
		908					
		909					
		910				.82	
		911					
#18	98						
19.90 / 20.00		912					
		913	.25			.33 .91	
		914					
		915				.23	
		916					
		917				.36	
		918				.40	
		919				.93	
		920					920.75' to 923.15': Marlstone, light gray, laminated, hard and competent.
		921				.45	
		922				.20	
#15		923				.12 .15	923.15' to 927.60': Oil shale, medium grade, dark gray and dark yellow brown, thinly laminated.
		924					
		925				.92	
		926					
		927				.62	927.60' to 936.76': Marlstone, light gray, hard and competent.
		928					
#19	100	929				.64	
19.93 / 20.00		930					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/28/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		931				
						.41
		932				
		933				
						.02
						.12
		934				
						.08
		935				.63
		936				
		937				
						.61
		938				
						.77
		939				
						.67
		940				
		941				
		942				
						.73
		943				
	08					.08
		944				
		945				
		946				
		947				
						.33
		948				
		949				
		950				
#20	100	951				
19.99 / 20.00		952				
		953				
		954				
		955				

LITHOLOGIC DESCRIPTION

936.76' to 937.60': Oil shale, medium to hig grade, dark and dusky yellow brown.

937.60' to 938.02': Oil shale, high grade, dusky yellow brown and black.

938.02' to 942.07': Oil shale, medium grade, dark and dusky yellow brown, hard and compete

942.07' to 943.08': Oil shale, low grade, light and dark brown, thin laminations, hard and competent.

943.08' to 958.30': Oil shale and Marlstone, low grade, light gray, laminated, hard, dense and competent.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/28/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		956					
		957					
		958					958.30' to 965.00': Oil shale, medium to high grade, mostly dark brown to black, with occasional 0.1' thick, light colored laminae. Hard, dense and competent.
			.30	Well defined			
		959					
		960					
		961					
		962					
		963				.62	
07							
		964					
			.42				
		965					965.00' to 981.00': Siltstone with inter-laminated marlstone, light brown to light gra some wavy laminations. Somewhat absorptive. Hard, dense, and competent.
		966					
		967					
		968					
		969					
		970					
		971					
		972					
#21	100						
		973					
19.95 / 20.00			.69				
		974					
		975					
		976					
		977					
		978					
		979					
						.33	
		980					
			.40				

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/29/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		981					
			.01			.43 .69	Rubble zone.
		982					
			.06			.39	
		983					
.02						.02 .17 .87	
		984					
		985					
						.76	
		986					
		987					
				.60 .80		.60	987.54' - Tuff, dark gray, .07' thick. 987.61' to 992.40': Oil shale, very low grade, very pale orange and light brown.
		988					
		989					
						.52	
		990					
#22	98						
		991					
19.98 20.00						.93	
		992		.86 .95	Healed	.12 .95	992.40' to 992.76': Oil shale, medium grade, dark and light brown.
		993				.07 .48	992.76' to 994.97': Oil shale, very low grade, very pale orange, light brown and light gray.
		994					
			.12				
		995				.63	994.97' to 1005.82': Marlstone, light gray.
		996					
		997					
		998				.02	
		999				.84	
		1000					
						.81	
		1001					
						.34	
		1002					
						.56	
		1003					
.00						.00	
		1004					
		1005		.90 .75			1005.82' to 1010.68': Oil shale, low grade, light brown.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/29/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	C.I.
		1006	.23 .33 .69	.23 .23 .61 .69 ←Healed		
		1007				.13
		1008				.88
		1009				.37
		1010				
		1011				.75
		1012				
		1013				.58
#23	78	1014				.54
19.93 / 20.00		1015				.60
		1016				.68
		1017				
		1018		.77 ←Healed		.28
		1019		.03		
		1020				
		1021				
.93		1022		.10		
		1023		.00		.36
		1024				
		1025		.55		
		1026				
		1027				
		1028		.68		
		1029				
		1030		.64		

LITHOLOGIC DESCRIPTION

1006.66' and 1006.74' - Thin bands of silt stone with silica and disseminated sulfide especially pyrite.

1007.00', 1007.18', 1007.34' - Thin bands of dark gray siltstone.

1008.88' to 1008.90' - Siltstone, medium gray.

1009.28' to 1009.36' - Siltstone, medium gray.

1010.32' to 1010.37' - Orange and white wavy tuff.

1010.68' to 1018.78': Marlstone, light gray, hard and competent.

1018.78' to 1026.12': Sandstone, medium gray moderately absorptive, some minor color banding, very fine grained.

1026.12' to 1028.30': Marlstone and sandston interlaminated. Grades into more marlstone an less sandstone at base, gray and very pale orange.

1028.30' to 1034.24': Marlstone, light gray with some thin beds of low grade interbedded shale.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/29/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1031					
		1032					
				.17 .48		.17	
		1033					
#24	87						
		1034					
20.17 / 20.00							1034.24' to 1038.84': Sandstone, medium gray with some thin laminations of low grade, pale yellow brown oil shale.
		1035					
		1036					
		1037					
		1038					1038.84' to 1050.00': Siltstone, calcareous, some interlaminations of pale brown and light gray shale.
						.84	
		1039					
		1040					
						.51	
		1041					
						.39	
		1042					
		1043					
10				.10 Sulfides		.10 .60	
		1044					
				.05 Broken→		.10 .39	
		1045					
		1046					
						.55	
		1047					
						.13 .79	
		1048					
						.41 .88	
		1049					
						.30 .64	
		1050					1050.00' to 1073.23': Siltstone, sandy, light gray, very fine grained sand, laminated with dark gray siltstone, hard, dense and competent
#25	95					.00	
		1051					
19.98 / 20.00						.62	1051.53' - Tuff, 0.25' thick.
		1052					
		1053					
		1054					

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/30/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1055					
		1056					
		1057					
		1058					
		1059					
		1060				.00	
		1061	.50				
		1062				.62	
		1063					
*08						.08	
		1064				.73	
		1065					
		1066					
		1067					
		1068					
		1069				.58	
#26	100	1070					
20.15 - 20.00		1071					
		1072				.15	
		1073				.00 .89	1073.23' to 1077.65': Oil shale, medium to low grade, dark brown and dark gray, hard and dense.
		1074				.28	
		1075					
		1076				.09 .32	1077.65' to 1079.10': Oil shale, medium grade dark and dusky yellow brown.
		1077				.78	
		1078				.54	1079.10' to 1080.12': Oil shale, high to medium grade, black and dark gray, (fairly dense).
		1079	.36 .55			.10 .87	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 7/30/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1080					1079.24' - Tuff, dark gray, 1/2" thick.
		1081				.59	1080.12' to 1082.33': Oil shale, very low grade, light and dark gray, thinly laminated.
		1082				.03 .17 .80	1082.33' to 1084.90': Oil shale, medium to high grade, dark and dusky yellow brown.
.23		1083				.23	
		1084					1084.90' to 1088.10': Marlstone, silty, light gray.
		1085					
		1086					
		1087				.47	
		1088					1088.10' to 1102.70': Oil shale, medium grac light gray to tan, high grade dusky and dark yellow brown oil shale zones at 1091.10' to 1092.95' and 1097.35' to 1100.00. In general the material is hard, dense and competent.
		1089					
		1090				.04 .69	
		1091				.92	
#27	100	1092					
20.03 20.00		1093					
		1094					
		1095				.50	
		1096					
		1097				.89	
		1098					1098.59' - Tuff bed, 0.11' thick.
		1099				.04 .40	
		1100				.24	
		1101				.40	1102.70' to 1106.77': Siltstone, sandy very pale orange.
		1102				.32	
.26		1103				.26 .50	
		1104					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/5/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1105				.72	
		1106					1106.77' to 1108.15': Siltstone, gray, fine-grained, with wavy-shaley laminations.
		1107				.48	
		1108					1108.15' to 1113.73': Oil shale, low grade, light brown with occasional dusky yellow brown, thin laminations.
		1109					
		1110					
		1111					
#28	100	1112					
20.09 / 20.00		1113				.90	1113.60' - Tuff, orange, irregular bedding porous texture, 0.05' thick.
		1114					1113.73' to 1117.40': Oil shale, medium grad medium brown with some dusky yellow brown, thin bands.
		1115				.80	
		1116					
		1117					1117.40' to 1127.39': Oil shale, very low grade or marlstone, light gray to very pale orange.
		1118					
		1119				.78	
		1120				.82	
		1121					
		1122				.84	
35		1123				.35	
		1124					
		1125				.00	
		1126					
		1127					1127.39' to 1131.53': Oil shale, low grade, very pale orange.
		1128					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/5/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1129					
		1130					
						18	
		1131					1131.53' to 1137.75': Oil shale, medium grade, dark brown, hard and competent.
						.57	
		1132					
#29	92					.67	
						.90	
		1133					
20.10						.46	
20.00						.73	
		1134					
						.15	
						.71	
		1135					
		1136					
		1137					1137.60' - Tuff, siliceous and sandy near base, dark brown, 0.15' thick.
				.88		.73	
		1138					
				←	Healed		1137.75' to 1142.58': Oil shale, low grade, light brown with occasional dusky yellow brown laminations, hard, dense, and competent
		1139					
				.55			
		1140					
		1141					
						.30	
		1142					1142.58' to 1145.72': Oil shale, medium to high grade, dark and dusky yellow brown.
						.65	
		1143					
45						.12	
						.45	
		1144					
						.09	
		1145					1145.72' to 1150.27': Oil shale, very low grade with thin interbedded light gray sandy siltstone (very fine grained sand).
		1146					
		1147					
		1148					
		1149					
		1150					1150.27' to 1151.28': Oil shale, medium grade dark yellow brown.
#30	100						
		1151					1150.80' - Tuff, light gray, 0.01' thick.
19.98						.40	
20.00		1152					1151.28' to 1154.52': Siltstone, very pale orange, with occasional dark brown shaley laminations.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/6/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1153					
		1154				.34	1154.52' to 1157.80': Oil shale, medium grad dusky and dark yellow brown; high grade zone 1156.00' to 1156.20'.
		1155				.08	
		1156					
		1157					1157.80' to 1169.00': Marlstone, interbedded with siltstone, light gray, hard, dense, and competent.
		1158				.79	
		1159				.84	
		1160					
		1161					
		1162					
		1163				.52	
43		1164				.43 .57	
		1165					
		1166				.82	
		1167					
		1168	.40 .68			.26	
		1169				.60	1169.00' to 1169.43': Siltstone, light gray, bedding is wavy and contorted.
#31	99	1170				.43	1169.43' to 1170.00': Marlstone, interlaminated with siltstone, light gray to light brown hard, dense, and competent.
20.10 20.00		1171					1170.00' to 1173.10': Oil shale, low grade, light brown with thin laminations of dusky yellow brown.
		1172					
		1173					1173.10' to 1173.83': Oil shale, medium to high grade, thick bands of dusky yellow brown and light brown.
		1174				.22	1173.83' to 1193.85': Marlstone, very pale orange and light gray, occasional dark yellow brown, thin shaley laminations. High grade zones at 1184.05' to 1184.20' and 1184.60' to 1184.85'.
		1175					
		1176					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/7/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1177					
		1178				.63	
		1179					
		1180				.54	
		1181				.95	
		1182				.75	
.53		1183				.53	
		1184				.63	1184.55' - Tuff bed, 0.05' thick.
		1185					
		1186				.00	
		1187				.86	
		1188					
		1189					
		1190					
		1191				.15	1191.30' - Wavy contorted beds of carbonate 1.0' thick.
#32	100	1192				.90	
19.95 / 20.00		1193				.57	1193.85' to 1196.75': Oil shale, medium grade dark and dusky yellow brown, thinly laminated.
		1194				.87	
		1195				.42	
		1196				.12 .87	1196.75' to 1197.80': Oil shale, high grade, dusky yellow brown.
		1197				.65	1197.80' to 1199.18': Oil shale, medium grade, dark brown.
		1198					
		1199					1199.18' to 1202.76': Oil shale, low grade, light brown and very pale orange.
		1200				.10	

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/7/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1201				.02 .87	
		1202				.55	1202.76' to 1205.76': Oil shale, high to medium grade, hard and competent.
48		1203				.48	
		1204				.38 .84	1204.7' - Tuff.
		1205					1205.76' to 1218.55': Marlstone, light gray to greenish gray, laminated. Hard, dense, and competent.
		1206				.83	
		1207				.10 .76	
		1208				.27	
		1209				.45	
		1210				.63	
#33	100	1211					
19.90 / 20.00		1212				.03 .08	
		1213				.57 .96	
		1214					
		1215					
		1216					
		1217				.50	
		1218					1218.55' to 1223.38': Siltstone, light brown laminated. Hard, dense, and competent.
		1219				.60	
		1220					
		1221					
		1222					
38		1223				.10 .38	1223.38' to 1226.50': Oil shale, medium grade dark and dusky yellow brown, laminated, hard, and competent.
		1224					

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/7/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1225				
						.45
		1226				
		1227				
		1228				
		1229				
						.77
		1230				
		1231				
		1232				
						.70
		1233				
#34	100					
		1234				
19.97						
20.00						.65
		1235				
		1236				
						.19
						.70
		1237				
		1238				
		1239				
						.68
		1240				
						.37
		1241				
		1242				
		1243				
35						.02
						.35
		1244				
			.40			.43
		1245				
			.74			
		1246				
						.18
		1247				
		1248				

LITHOLOGIC DESCRIPTION

1226.50' to 1232.07': Marlstone, light gray to light brown, laminated.

1232.07' to 1233.67': Oil shale, medium to high grade, dark and dusky brown, thin banded.

1233.67' to 1237.60': Marlstone, light gray, some wavy laminations at 1236.50' to 1236.70'.

1237.60' to 1241.00': Oil shale, medium grade, very thin laminations.

1241.00' to 1241.70': Oil shale, low grade, light brown and light gray.

1241.70' to 1243.35': Marlstone, light gray, laminated.

1243.35' to 1246.55': Oil shale, low grade, light brown to light gray, thinly laminated.

1246.55' to 1249.10': Marlstone, light gray, hard, dense, and competent.

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/8/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1249				
		1250				.98
		1251				.87
		1252				.79
		1253				.64
		1254				.36 .52
#35	99					
20.00 20.00		1255				
		1256				
		1257				.45
		1258				
		1259				.72
		1260		.02 .30		4 Total
		1261				.02 .82
		1262				.56
		1263				.94
35		1264				.48
		1265				.63
		1266	.75			.95
		1267				.22
		1268				.09
		1269				
		1270				.67
#36	100	1271				
20.02 20.00		1272				
		1273				

LITHOLOGIC DESCRIPTION

1249.10' to 1252.62': Oil shale, medium grade interlaminated dark and dusky yellow brown. Hard and competent.

1250.65' to 1250.89' - Tuff, black and white with sandy texture. Porous and vuggy

1252.62' to 1259.70': Oil shale, very low grade with interbedded marlstone. The material is light brown to light gray and competent.

1259.70' to 1260.28': Oil shale, medium grade, dark brown with occasional dusky yellow brown laminations.

1260.28' to 1264.12': Marlstone, light gray, some light brown thin shale laminations.

1264.12' to 1265.30': Oil shale, low to medium grade, interlaminated, dusky yellow brown and medium gray. Hard and competent.

1265.30' to 1265.71': Oil shale, low grade, alternating thin laminations of dark and light brown.

1265.71' to 1269.50': Marlstone, light gray with occasional dark yellow brown shaley laminations, hard and dense.

1269.50' to 1270.84': Oil shale, high grade, dusky yellow brown with interlaminations of medium brown. Some evidence of bioturbation.

1270.84' to 1274.60': Oil shale, low grade, medium to light brown, indistinct laminations.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/8/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1274					
						.39	1274.60' to 1276.10': Oil shale, medium to high grade, very competent.
		1275					
						.67	
		1276					1276.10' to 1277.50': Oil shale, low grade, gray and very pale orange.
		1277					
						.40	1277.50' to 1279.11': Oil shale, medium to high grade.
		1278				.97	
						.20	
						.69	
		1279					1279.11' to 1287.37': Oil shale, very low grade, interbedded with light gray marlstone
		1280					
						.15	
						.65	
		1281					
						.28	
		1282					
						.52	
		1283					
37							
						.37	
		1284					
		1285					
		1286					
						.65	
		1287					1287.37' to 1289.59': Oil shale, medium to high grade, dark and dusky yellow brown, some evidence of bioturbation.
						.53	
						.95	
		1288					
						.30	
		1289					1289.59' to 1292.39': Oil shale, low grade, light gray and very pale orange.
						.32	
		1290					
#37	99						
		1291					
19.81 / 20.00							1292.39' to 1293.80': Oil shale, medium to high grade, interlaminations of dark and dusk yellow brown.
		1292					
						.35	
						.62	
		1293					1292.59' - Fish fossil (?)
		1294					1293.80' to 1297.77': Oil shale, low grade, some cross laminations (scour and fill type).
		1295					
		1296					
		1297					1297.77' to 1298.28': Oil shale, high grade, dark brown to black, hard and competent.
						.68	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/9/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1298				.28	1298.28' to 1299.56': Oil shale, medium grac dark brown, laminated.
		1299					1299.56' to 1312.50': Oil shale, medium to high grade, interlaminations of dark and dusky yellow brown. Abundant parting planes from 1307.38' to 1310.95'.
		1300					
		1301				.95	
		1302				.89	
		1303				.49 .88	
.28		1304		.28 .21		.04 .18 .28	
		1305					
		1306				.04	
		1307				.94	
		1308	.38			.15 .51	
		1309	5 Total				
#38	70	1310	4 Total				
20.00 20.00		1311	.84 .95				
		1312		.38 .83	←Rubble zone		1312.50' to 1314.10': Marlstone, light brown to gray, hard and competent.
		1313				.45	
		1314					1314.10' to 1314.60': Siltstone, sandy, light gray, slightly friable and absorptive.
		1315				.10 .83	1314.60' to 1317.37': Oil shale, low grade, light brown with occasional thin laminations of dusky yellow brown.
		1316				.83	
		1317					1317.37' to 1317.70': Oil shale, medium grad dark and dusky yellow brown.
		1318		.70		.40 .71 .82	1317.70' to 1318.05': Oil shale, high grade, black and dusky yellow brown.
		1319	.77 .86	.05	.05 .30	.45 .68	1318.05' to 1318.86': Oil shale, medium grade dark gray, dusky yellow brown, thinly laminate
		1320			.05 .20 .24 .38	4 Total	1318.86' to 1323.91': Oil shale, low grade, medium gray with some light brown laminations
		1321		.67	.38 .44	.44 .67	
				.02		.59	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/9

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1322		.18 .84		.42 .91	
.28		1323				.28	1323.91' to 1324.10': Siltstone, very pale orange and light gray, siliceous, massive.
		1324					1324.10' to 1325.62': Oil shale, low grade, interlaminations of dark brown and light gray
		1325					1325.62' to 1329.80': Oil shale, medium grade, thin to thick interlaminations of light and dark brown.
		1326			.40 .65 .75	.85	
		1327	.71		.23 .50		
		1328	.11			.25	1329.80' to 1332.80': Oil shale, very low grade, interlaminations of very light gray and light brown.
		1329				.00	
		1330					
		1331					
#39	90						
19.90 / 20.00		1332					1332.80" to 1335.72': Oil shale, medium grade, thin interlaminations of dark and dusky yellow brown.
		1333					
		1334				.88	
		1335				.58	1335.72' to 1338.70': Marlstone, light gray, hard and competent.
		1336					
		1337					
		1338					1338.70' to 1340.28': Oil shale, low grade, interlaminations of light gray and light brow
		1339					
		1340				.80	1340.28' to 1341.48': Oil shale, medium grade, thin interlaminations of dark and dusky yellow brown.
		1341					1341.48' to 1343.18': Oil shale, low grade, interlaminations of light brown and light gra
		1342			.25 .38		
.18		1343				.00 .18	1343.18' to 1344.68': Oil shale, interlaminations of light and dark brown.
		1344					1344.68' to 1347.07': Oil shale, high grade, dusky yellow brown.
		1345	.48 .63		.12 .25	.00	Multiple healed joints.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/9/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1346	6 Total				
		1347					1347.07' to 1351.80': Oil shale, low grade, mostly light brown, competent.
		1348					
		1349				.92	
		1350					
#40	91						
13.83 / 14.00		1351				.88	1351.80' to 1352.33': Oil shale, high grade, interlaminations of dusky yellow brown and black.
		1352				.65 .83	1352.33' to 1355.76': Oil shale, low grade, medium brown and gray.
		1353					
		1354				.13	
		1355				.33	1355.76" to 1360.95': Marlstone, light gray, hard and competent.
		1356				.93 .96	
.01		1357				.92	
#41	100	1358					
7.45 / 7.00		1359					
		1360					1360.95' to 1363.12': Oil shale, low grade, gradational contact with overlying marlstone.
		1361				.93	
		1362					
		1363				.70	1363.12' to 1366.60': Oil shale, high grade, dusky yellow brown with some laminations of very pale orange, competent and dense.
.46		1364				.05 .46 .83	
		1365				.05	
		1366				.19 .86	1366.60' to 1372.64': Oil shale, low grade, very pale orange, minor laminations.
		1367				.21	
		1368					
		1369				.29	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/10/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		1370				
						.67
		1371				
		1372				
		1373				
			.00 .08			
		1374				
#42	83					.40 .66 .80
		1375				
20.00 20.00				.55 .75 ← Healed		5 Total
		1376				
				.08 .35 ← Healed		5 Total
		1377				
						.06 .18
				.97		
		1378				.95
			.25	← Healed		.15 .79
		1379				
				.40 .54 .93		.42 .84
		1380				
			.24 .30			
		1381				
		1382				
						.51
		1383				
						.52 .90
		1384				
×46			8 Total			
		1385				
			7 Total	.50		
		1386				
			.66	.10 .48		
		1387				
				Multiple joints, rubble		
		1388				
			.47			.85
		1389				
						.30
		1390				
		1391				
						.74
		1392				
		1393				

LITHOLOGIC DESCRIPTION

1372.64' to 1374.66': Oil shale, low to medium grade, dark gray and dark brown, thin laminated.

1374.66' to 1384.50': Limestone, light gray to medium gray, some narrow banding and some thin laminations around 1380' to 1385'.

1384.50' to 1406.30': Siltstone and marlston The material consists of interbedded light gray and light brown calcareous siltstones and marlstones and very fine grained gray sandstones. The bedding is generally flat lying but also has several undulating and irregular laminations, occasional clay beds (no oil shales).

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/10/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1394					
						.55	
		1395					
#43	89					.06	
		1396					
19.98 / 20.00						.06	
		1397					
						.36	
		1398					
						.32	
		1399					
						.43	
		1400					
						.90	
		1401					
		1402					
		1403					
						.02 .30 .73	
		1404					
~~#44~~						.44	
		1405					
		1406					1406.30' to 1412.23': Oil shale, low grade, light brown, very competent.
						.82	
		1407					
		1408					
		1409					
		1410					
		1411					
						.03	
		1412					1412.23' to 1413.45': Marlstone, light gray, hard and competent.
						.79	
		1413					
						.85	1413.45' to 1416.33': Oil shale, medium grade interlaminations of dark, dusky yellow and light brown.
		1414					
						.54 .95	
		1415					
#44	100					.19 .62	
		1416					1416.33' to 1425.00': Oil shale, low grade, interlaminations of light brown and very pale orange. Hard and competent.
20.01 / 20.00							
		1417					

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/11/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1418				
						.72
		1419				
		1420				
						.45
		1421				
						.69
		1422				
		1423				
						.61
						.79
		1424				
45						.28
						.45
		1425				
		1426				
			.72			.83
			.78			
		1427				
		1428				
			.43			
			.45			
		1429	.63			
			.11			
			.19			
		1430				
		1431				
		1432				
			.56			
		1433				
		1434				
		1435				
		1436				
#45	96					.17
		1437				
20.10 / 20.00						.04
		1438				
						.04
		1439				
						.42
		1440				
		1441				
						.20

LITHOLOGIC DESCRIPTION

1425.00' to 1426.18': Oil shale, medium grac dark and dusky yellow brown, with interbedded and interlaminated light gray, very fine-grained sandstone.

1426.18' to 1428.04': Limestone, light and medium gray with occasional light gray sandstone laminations.

1428.04' to 1428.17': Sandstone, light brown very fine grained, siliceous.

1428.17' to 1462.05': Limestone, light and medium gray, some laminations, hard and competent.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/11/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICKS	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1442					
						.87	
		1443				.08 .55	
		1444					
.55				.55 .92			
		1445					
		1446					
		1447					
						.50	
		1448					
		1449					
		1450					
		1451					
						.64	
		1452					
		1453					
#46	99						
20.10 / 20.00		1454					
						.14	
		1455					
		1456					
						.18	
		1457					
		1458					
		1459					
		1460					
						.40 .93	
		1461					
		1462					
		1463				.56 .78	
		1464					
.65				.65		.23	
		1465					
				.28			

1462.05' to 1463.85': Oil shale, low grade, interbedded with light gray siltstone.

1463.85' to 1463.94': Oil shale, band of medium grade, dusky yellow brown.

1463.94' to 1466.85': Siltstone, light gray with some very thin laminations of light brown, kerogen-poor shales.

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/11/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1466				
						.98
		1467			Broken	.03
		1468				
						.06
						.08
		1469				
						.66
		1470				.98
		1471				
						.32
		1472				
		1473				
#47	81					.85
		1474				
19.77 / 20.00						
		1475				
						.08
		1476				
				.00		.00
						.50
		1477				
		1478				
			Healed→	.38 .93		.38
		1479				
						.38
						.89
		1480				
						.49
		1481				
		1482				
		1483				
						.34
						.80
		1484				
42				.42		.42
		1485				
		1486				
		1487				
						.08
						.49
						.76
		1488				
						.39
		1489				
						.42

LITHOLOGIC DESCRIPTION

1466.85' to 1468.13': Oil shale, medium to high grade, dusky yellow brown and dark gray. Some evidence of bioturbation.

1468.13' to 1476.63': Oil shale, very low grade, very pale orange with occasional light brown bands of medium brown; some evidence of bioturbation. High grade zone at 1474.84' to 1475.19'.

1476.63' to 1479.35': Oil shale, medium to low grade, dark and light brown.

1479.35' to 1479.81': Oil shale, low grade, mostly light brown with some dark brown.

1479.81' to 1480.88': Oil shale, high grade, dusky yellow brown, thinly laminated with some dark gray.

1480.88' to 1487.33': Oil shale, low grade, light brown with bands of dusky, yellow brown

1487.33' to 1501.31': Oil shale, medium to dark gray, competent and dense.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/12/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		1490				
						.95
		1491				
				Near vertical joint		
		1492				
		1493				
						.32
		1494				
		1495				
#48	40			.77		.84
		1496				
20.13 / 20.00						
		1497				
						.00
						.75
		1498				
						.58
		1499				
						.43
		1500				
						.37
						.48
		1501				.93
			.47	.08		.11
			.66	.12 Healed		
		1502	.82	.60		.31
		1503				
						.84
		1504				
55						
						.55
		1505				
						.26
						.90
		1506				
		1507				
						.33
						.67
		1508				
						.21
						.66
		1509				
			.12			
			.25			.74
		1510				
			.01			.91
		1511				
			.94			.19
						.66
		1512				
						.21
						.41
						.80
		1513				
			.29			
			.39			.71

LITHOLOGIC DESCRIPTION

1501.31' to 1512.00': Siltstone, very calcareous, light and medium gray laminations with occasional dark gray thin laminations, mostly competent.

1512.00' to 1519.70': Marlstone or limestone gray thin clay laminations, occasional thin light brown laminations.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/12/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1514	.68 .85			.27 .56
#49	93	1515	.03 .63 .80			
19.68 20.00		1516				.03 .35 .68
		1517	.23			.00 .73
		1518				4 Total
		1519	.62			.35
		1520				.41 .95
		1521	.23 .39			4 Total
		1522	.37 .60			.15
		1523				.55 .99
.23		1524		.23		.23 .56 .90
		1525				.23 .58 .82
		1526				.50 .86
		1527				.73
		1528				.10
		1529		.10		.10 .25
		1530		.35 .28		.30 .67
		1531		.35 .46		.30 .35 .45
		1532	.46			.08 .89
		1533				.30 .67
		1534				.67 .77
#50	66	1535				
19.96 20.00		1536				.31
		1537	.64			.22 .96

LITHOLOGIC DESCRIPTION

1519.70' to 1520.00': Limestone, silty, ligh brown and very light gray.

1520.00' to 1521.15': Limestone, light and dark gray with some thin dark brown laminatic

1521.15' to 1522.90': Oil shale, low to medium grade, limey, dark and dusky yellow brown with some thin light gray laminations.

1522.90' to 1524.45': Oil shale, low grade, mottled bedding, bioturbation burrows.

1524.45' to 1524.57': Oil shale, high grade, dusky yellow brown and black.

1524.57' to 1534.09': Claystone, dark gray, forms blocky fractures.

1534.09' to 1534.66': Oil shale, low grade, light brown, dark brown, and dark gray, thinly laminated.

1534.66' to 1535.30': Siltstone, limey, very pale orange.

1535.30' to 1537.22': Limestone, light and dark gray, laminated.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/12/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1538					
						.51	1537.22' to 1544.74': Claystone, calcareous, dark gray, brittle.
		1539					
		1540					
						.63	
		1541					
						.17	
		1542					
				.95		.04	
						.82	
		1543					
				.75		.25	
		1544					1544.74' to 1553.75': Marlstone, light brown very pale orange.
19						.07	
						.34	
		1545					
						.26	
		1546					
		1547					
		1548					
		1549					
						.02	
		1550					
		1551					
#51	95						
		1552					
20.07 / 20.00							
		1553					1553.75' to 1566.00': Limestone, dark and light gray, thinly laminated, hard and competent.
						.32	
		1554					
						.42	
		1555					
						.02	
						.20	
		1556					
						.10	
		1557					
		1558					
						.15	
		1559					
			.48				
			.50				
		1560					
						.04	
						.55	
		1561				.98	
						.58	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/13/82

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1562				.64	
		1563		.12		.22	
		1564		.26		.45 .60 .80	
26		1565				.00 .67 .78	
		1566					1566.00' to 1578.68': Siltstone, calcareous, light gray, very pale orange with dark gray bands from 1574.50' to 1578.68'.
		1567				.05 .53	
		1568				.35	
		1569					
		1570				.65	
		1571				.19	
		1572					
#52	99	1573					
19.79 20.00		1574				.91	
		1575					
		1576				.05 .10	
		1577					
		1578					1578.68' to 1582.62': Claystone, calcareous, dark gray, blocky fractures.
		1579				.68	
		1580				5 Total	
		1581				.34 .84	
		1582				.05 .28 .65	1582.62' to 1584.96': Siltstone, calcareous, dark and light gray, thinly laminated, hard and competent.
		1583				.72	
05		1584				.05 .96	1584.96' to 1587.51': Claystone, calcareous, dark gray, blocky fractures.
		1585				4 Total	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERY DATE 8/13/82

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1586				6 Total	
		1587				5 Total	1587.51' to 1595.38': Limestone, silty, dark and light gray, banded.
		1588				.68	
		1589				.82 .83 .90	
		1590				.65 .71 .88	
		1591				.58	
#53	47*	1592				4 Total	
20.08 / 20.00		1593				.55	
		1594				.00 .28	
		1595				.86 .99	1595.38' to 1601.53': Claystone, calcareous, dark gray, blocky fractures.
		1596				5 Total	
		1597	Due to clay content of the material, the rock decrepitated when it became wet during the drilling.			.17 .53	
		1598				4 Total	
		1599				7 Total	
		1600				7 Total	
		1601				.29 .62 .88	1601.53' to 1602.82': Claystone, dark gray, thinly laminated with medium gray silty limestone.
		1602				.30 .93	1602.82' to 1620.00': Claystone, calcareous, dark gray.
		1603				.75 .92	
~~#13~~		1604				6 Total	
		1605				7 Total	
		1606				.19 .34	
		1607				.70	
		1608				.10 .22 .59	
		1609				.08 .59	

* Coring induced fractures included in RQD due to the nature of the material.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/13/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1610				.36	
#54	45*	1611				.10 .58	
20.10 20.00		1612				.21 .63 .94	
		1613				4 Total	
		1614				.71 .86	
		1615				.12 .41 .72	
		1616				.27 .56 .91	
		1617				4 Total	
		1618				5 Total	
		1619				.20 .46 .92	
		1620					1620.00' to 1624.00': Limestone, silty, competent, light gray.
		1621					
		1622				.39	
		1623				.78	
23		1624		.23		.23	1624.00' to 1631.00': Siltstone, calcareous, some thin shaley laminations with some thick limestone laminations.
#55	79	1625		.92			
20.05 20.00		1626					
		1627		.52		.19 .83	
		1628					
		1629		.59			
		1630					
		1631	.25 .44			.02 .56	1631.00' to 1665.50': Marlstone, interbedded with calcareous siltstone, light gray, somewhat friable and absorptive.
		1632	.20 .56 .74			.41	
		1633				.09 .60	

* Coring induced fractures [illegible] RQD due to the nature of the material

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/18/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1634					
		1635					
		1636					
		1637					
		1638				.67	
		1639					
		1640				.92	
		1641					
		1642				.00 .53	
		1643		.50			
		1644				.23 .44 .72	
.28		1645		.28		.02 .28 .73	
		1646				.23 .62 .76	
		1647				.60	
		1648					
		1649			broken →	.70 .80	
		1650					
		1651		.75 .85		.20	
		1652				.19	
		1653				.07	
#56	99	1654					
19.91 20.00		1655				.23	
		1656					
		1657				.55	
						.39 .42	

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/18/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1658					
		1659				.44	
		1660				.28	
		1661					
		1662					
		1663				.69	
19		1664				.02 .19	
		1665				.13	1665.20' to 1669.23': Claystone, light gray, soft and friable.
		1666			Blocky fractures	.12 .28 .78	
		1667				.62 .75	
		1668	.20 .32				
		1669	.56 .63			.32	1669.23' to 1679.85': Siltstone, calcareous, thin laminations of brown and gray.
		1670	.38			.17 .95	
		1671				.45	
		1672				.15	
		1673	.44 .60 .86			.00	
#57	77	1674	4 Total			.62	
20.13 20.00		1675	.32 .47 .53	←Rubble, broken			
		1676	4 Total				
		1677	.32 .41 .97				
		1678	5 Total				
		1679	.00 .43				1979.85' to 1690.20': Marlstone, light brown and light gray.
		1680				.14 .45	
		1681		.10 .55		.40 .55	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/19/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1682					
						.69	
		1683					
						.80	
		1684					
32				.32		.32	
		1685					
				.34		.80	
				.80			
		1686					
		1687					
		1688					
		1689					
						.95	
		1690					1690.20' to 1691.52': Sandstone, light gray, with some very thin shaley (brown) laminations
						.71	
		1691					1691.52' to 1701.00': Siltstone, calcareous, light gray, some thin laminations of sandstone and limestone.
						.96	
		1692				5 Total	
		1693					
#58	52*					.11 .32 .86	
		1694					
20.05 / 20.00				.43		.14 .52 .82	
		1695					
				.00		.31 .46	
				.46		.97	
		1696					
				.56		.24 .35 .53	
		1697				5 Total	
		1698				4 Total	
		1699					
				.68		4 Total	
		1700					
				.44		.25 .44 .80	
		1701				4 Total	1701.00' to 1707.30': Marlstone, light brown and light gray
		1702				.10 .79	
		1703				.72 .97	
		1704					
37						4 Total	
		1705	.67 .25	Multiple parting planes		.10 .40	

* Coring induced fractures included in RQD due to nature of the material

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/19/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1706	6 Total				
		1707	.08				1707.30' to 1712.85': Oil shale, some kerog present, dark and dusky yellow brown, thin to medium laminations.
		1708	.90				
		1709	4 Total				
		1710	5 Total				
		1711	4 Total				
		1712	.11 .46			.72	1712.85' to 1719.00': Oil shale, minor kerogen or organic content, light brown, thinly laminated.
		1713	4 Total				
		1714	4 Total				
#59	27	1715	4 Total				
19.30 / 20.00		1716	7 Total				
		1717	7 Total				
		1718	6 Total	.18 .62	.40 .62		
		1719	4 Total				1719.00' to 1724.05': Marlstone, light gray, soft and broken.
		1720	.04 .64				
		1721					
		1722	.81 .92				
.67		1723	7 Total			.67	
		1724	5 Total				1724.05' to 1727.42': Oil shale, medium to high organic or kerogen content, dark and dusky yellow brown, thinly laminated.
		1725	7 Total		.12 .28		1724.85' to 1725.02' - Sandstone, medium gray.
		1726	6 Total		.10 .23		
		1727	.10				1727.42' to 1728.50': Marlstone, light brown.
		1728				.59	1728.50' to 1729.15': Oil shale, medium to high organic content.
		1729	.05			.63	1729.15' to 1729.40': Siltstone, very pale orange.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/20/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1730	6 Total				1729.40' to 1732.14': Oil shale, medium to high kerogen or organic content.
		1731	8 Total	.63			
#60	65	1732	.20				1732.14' to 1732.20': Oil shale, algal stromatalite in kerogen-rich shale.
20.11 / 20.00		1733	.68	.68			1732.20' to 1735.02': Marlstone, light gray.
		1734					
		1735				.77	1735.02' to 1736.48': Oil shale, low grade, hard, competent, light brown.
		1736	.52	Breaks into very thin plates			1736.48' to 1739.70': Oil shale, high grade, dusky brown friable.
		1737					
		1738	.61				
			.24 .49 .54			.01	
		1739	.34 .52 .67				1739.70' to 1743.78': Marlstone, light brown and gray, some low grade kerogen shale laminations.
		1740				.70	
		1741	.79				
		1742				.08	
						.43 .88	
		1743				.13 .78	1743.78' to 1747.53': Oil shale, medium grade, thinly laminated with alternating bands of dark and dusky yellow brown.
.78		1744	.16			.79	
		1745		.00 .45	.00 .70 .18 .88	.00 .38	
		1746	.26 .66			.08 .81	
		1747	.68 .85			.28 .51	1747.53' to 1749.25': Limestone, dark gray, no distinct laminations.
		1748	6 Total			.78	
		1749	5 Total				1749.25' to 1755.50': Limestone, light gray, very thinly laminated, generally hard and competent.
		1750	.45 .94			.18	
		1751				.73	
		1752					
#61	80	1753					
20.05 / 20.00						.92	

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/20/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1754				
		1755				
						.21
		1756				
		1757				.00 .68
		1758				
		1759				
		1760				
		1761				.32 .63 .83
		1762				.32
		1763				.38 .83
X .83		1764				.53
		1765				
		1766				
		1767	.82			.54 .67 .99
		1768	.24 .55			
		1769				.56 .88
		1770	.10 .30 .48			
		1771	.82			4 Total
		1772	.23			4 Total
#62	47	1773	5 Total			
20.19 20.00		1774				.40 .53 .65
		1775	4 Total			
		1776	.20 .52 .86			
		1777	6 Total			

LITHOLOGIC DESCRIPTION

1755.50' to 1777.18': Marlstone, light brown and light gray, hard and competent.

1777.18' to 1780.00': Oil shale, medium to high organic or kerogen content. Mostly dark brown.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/21/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.
		1778	5 Total			.04 .87
		1779				4 Total
		1780				6 Total
		1781				11 Total
		1782				9 Total
		1783				.26 .42 .76
.02		1784				4 Total
		1785				6 Total
		1786				6 Total
		1787				5 Total
		1788				.09 .36 .89
		1789				.32
		1790				.89
						5 Total
		1791				5 Total
		1792				.32 .84
		1793	.43			4 Total
		1794				.14 .26 .90
		1795				.12 .86
#63	40*	1796				.51 .72 .92
19.90 / 20.00		1797				5 Total
		1798				
		1799				.78
		1800				.48
		1801				.21 .62 .94

LITHOLOGIC DESCRIPTION

1780.00' to 1804.30': Marlstone, medium gray some interbedded shale. The material is soft and crumbly.

* Core induced fractures were included in RQD due to nature of the material.

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/21/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.
		1802				.76 .78 .87
		1803				
92				.92		6 Total
		1804				.11 .69 .89
		1805				.02 .10 .35
		1806		.95		
				.40		4 Total
		1807				5 Total
		1808				.52 .83 .95
		1809				4 Total
		1810				
		1811				.04
		1812				
#64	43*	1813				
20.14 20.00		1814				.06 .80
		1815				.15 .22 .97
		1816				.81
		1817				.18 .50 .67
		1818				5 Total
		1819				.27 .93
		1820				5 Total
		1821				5 Total
		1822				4 Total
		1823				7 Total
06		1824				.06 .68 .81
		1825				4 Total

LITHOLOGIC DESCRIPTION

1804.30' to 1942.09': Claystone, calcareous light gray. In general, the material is very soft and incompetent. It is broken and fractured throughout, mainly as a result of the drilling process. It appears that the clay material swells and breaks when wetted by the drill water.

* Coring induced fractures included in RQD due to nature of the material

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/22/8

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1826				7 Total	
		1827				.23 .50 .86	
		1828				.13 .76 .96	
		1829				.22 .50 .62	
		1830				.45 .78 .93	
		1831		.75		4 Total	
#65	47*	1832				5 Total	
19.93 / 20.00		1833				6 Total	
		1834				.75	
		1835					
		1836				.17 .32	
		1837				.48	
		1838					
		1839				.11 .86 .99	
		1840				.21	
		1841				.82	
		1842					
		1843				4 Total	
.99		1844				4 Total	
		1845		.42		.13 .47 .95	
		1846				.32 .60 .82	
		1847		.34		4 Total	
		1848				.52	
		1849				5 Total	

* Coring induced fractures included in RQD due to the nature of the material

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/22/8

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1850				.32 .54	
		1851				.03 .67 .71	
		1852				.27 .88	
#66	35*	1853				.13 .79	
20.07 20.00		1854				.53 .92	
		1855				.39 .60 .68	
		1856				.22 .72	
		1857				6 Total	
		1858				.43 .78	
		1859				9 Total	
		1860				.38 .50 .98	
		1861				.28 .52	
		1862				.15 .34 .54	
		1863				.28 .64 .98	
		1864				8 Total	
×06		1865				.11	
		1866				6 Total	
		1867				.03 .22 .51	
		1868				6 Total	
		1869				.02 .37 .90	
		1870				4 Total	
		1871				4 Total	
		1872				5 Total	
		1873				.28 .66	

* Coring induced fractures included in RQD due to nature of the material

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/22/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1874					
#67	28*					.33 .79	
20.04 20.00		1875				4 Total	
		1876					
						4 Total	
		1877					
				.02 .02		.28 .45	
		1878			Broken→		
						.60	
		1879					
				.43		.43	
		1880					
				.20		.41	
		1881					
						.37 .48 .61	
		1882					
						.00 .88	
		1883					
						.18	
		1884					
.10						.10 .30	
		1885					
						.23	
		1886					
						.19 .48	
		1887					
				.45		7 Total	
		1888					
						.25 .95	
		1889					
				.63			
		1890					
				.72		.43	
		1891					
						.16 .76	
		1892		.76			
		1893					
						.54	
		1894					
		1895					
						.24 .49	
		1896					
#68	62*					.11	
18.90 19.00		1897				.28 .72	

* Core induced fractures were included in the RQD due to the nature of the material

CLIFFS ENGINEERING, INC.

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/23/

RUN	RQD	DEPTH	FRACTURES P.P.	FRACTURES JOINT	FRACTURES SLICK	FRACTURES C.I.	LITHOLOGIC DESCRIPTION
		1898					
		1899				.49	
		1900					
		1901				6 Total	
		1902				.99	
		1903			Rubble Broken →	.46	
.00							
		1904			Broken →	.94 .31	
		1905				.62	
		1906				4 Total	
		1907				4 Total	
		1908				5 Total	
		1909				4 Total	
		1910				.55	
		1911				.77	
#69	18*	1912				4 Total	
18.74 / 20.00		1913				.12 .34 .82	
		1914				.18 .79 .86	
		1915		.30 .53		.51	
		1916				.22 .39 .89	
		1917				.41	
		1918				4 Total	
		1919				.05 .33 .45	
		1920		.92 .09		.10 .35 .69	
		1921				.69 .80 .91	
.74						8 Total	

* Coring induced fractures included in RQD due to nature of the material

HOLE NO. DH-8 PROJECT: PACIFIC PROPERTY DATE 8/23/

RUN	RQD	DEPTH	FRACTURES P.P.	JOINT	SLICK	C.I.	LITHOLOGIC DESCRIPTION
		1922				6 Total	
		1923				6 Total	
		1924				.62	
		1925				4 Total	
		1926				.15 .60 .99	
		1927		.90	Brittle →	.40 .60	
		1928		.05		.60 .95	
		1929				.38 .87	
#70	18*	1930				.35 .65	
20.35 / 19.00		1931				.10	
		1932				.07 .70	
		1933				5 Total	
		1934				6 Total	
		1935				7 Total	
		1936				9 Total	
		1937				7 Total	
		1938				6 Total	
		1939				7 Total	
		1940		.75 .95		6 Total	
		1941				4 Total	
↓09		1942					
T.D.						.09	

* Coring induced fractures were included in the RQD due to the nature of the material