546. 4116

707. 558-
707-523-2961
LOUIS E. CAPUANO, JR.

MORNING DRILLING REPORT

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
2 13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-12-81	11	1045

SIZE	FORMATION TYPE AND TOPS
12 1/4"	BASALT & CLAY.

D	DEPTH	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
13 3/8	1008'		3	Baron Rig #8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	SPM
5	4	12 1/4	Smith 3 JTS	20	20	20	INC.	29	3 1/2	7.5	40	60	-	-	-	200	422	81		5 1/2	140		
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	4:30	68	44	14/7	5/22	10	15.2	2	1/4	4	-	400	-	-	926	15,52

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0
10														
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 7	Lipple up BOE.
3	Repair SCR control.
3 1/2	Finish nipple up BOE.
3	Make up BHA.
1/2	Lub Rig
1/2	RIH
1	Test BOE w/ 250 PSI OK
1	Lay Down 13 JTS 4 1/2 DP
1	Drill out cmt + shoe @ 1,008'
3 1/2	Drill 12 1/4" Hole to 1045
	@ 7 Am 8-12-81

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☑ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

707-546-4116 707-523-2960

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LIN

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-13-81	12	1204

2 | SIZE | FORMATION TYPE AND TOPS |
|---|---|
| 1154 | 12¼ CLAY & BASALT |

3 | SHOE DEPTH | LINERS-OD TOP AND SHOE DEPTHS | REPAIR DOWNTIME | CONTRACTOR AND RIG NO. |
|---|---|---|---|
| 13 3/8 1,008 | — | | |

4 BRIEF DESCRIPTION OF OPERATIONS

No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	S
5	4	12¼	3 JS	20	20	20	1146	185			40	65	—	—	—	500	521	98	183	5½			1.
6																				6			

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	4:30	68	40	12/6	4/18	11	10	2/32	1/2	6	TR	600			1943	17,46

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGL SEV 0/10
10	1156	1¾	N-12W											
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 11	DRILL to 1156
1	CIRC & SURVEY
12	DRILL to 1204

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPOR

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
—	8-14-81	15	1364

2 | SIZE | FORMATION TYPE AND TOPS |
|---|---|
| 160 / 12 1/4 | Basalt- |

3 | CASING-OD SHOE DEPTH | LINERS-OD TOP AND SHOE DEPTHS | REPAIR DOWNTIME | CONTRACTOR AND RIG NO. |
|---|---|---|---|
| 13 3/8 1,008 | — | — | Barron Rig #8 |

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO LIN.	SP
RB	4	12 1/4	3J3	20	20	20	1220	204	28	7.2	40	65	2	2	I	450	450	85	180	5 1/2	85	6	2
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	6 pm	68	40	12/9	5/14	11.5	8.2	2/32	1/2	6	—	600	—	—	1450	18,91[illegible]

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'
10	1221	1 45	N17W											
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 3	DRILL to 1220
1/2	CIRC
1/2	SURVEY
4	TRIP + Bit CHANGE.
5	DRILL to 1263.
	DROP 500 PSI
3	POH look FOR WASH out.
1/2	1 MY DOWN SHOCK SUB.
2 1/2	RIH.
5	DRILL to 1364 @ 2:00 pm - 8-14-81

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL & DESCRIP	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS .. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-15-81	14	1627

2 SIZE 12 1/4 — FORMATION TYPE AND TOPS: BASALT w/ Clay STRINGERS

3 DI ... SHOE DEPTH: 13 3/8 @ 1,008 — LINERS-OD TOP AND SHOE DEPTHS: — — REPAIR DOWNTIME: — — CONTRACTOR AND RIG NO.: BARON Rig #8

4 BRIEF DESCRIPTION OF OPERATIONS
No. of Comp. Running:
Cubic Feet per Min:
Compressor Pressure:
Mist:
Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN VEL FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN
5	5	12 1/4	HTC F33	15	15	15	INC	469	31	15	35	70	—	—	—	900	491	12	305			
6																						

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY COST	TOTAL MUD COST
7	5 PM	69	40	14/8	3/13	10	12-8	2/32	1/4	6	—	600				20

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'
10	1395	7°30	N17W											
11	1581	7°30	N32W											
12														
13														

HOURS — OPERATIONS IN SEQUENCE — BOTTOM HOLE ASSEMBLY (BHA)

14 21½ DRILLING.
2½ SURVEY @ 1395 + 1581

BHT. 125°
FLT 117°

15 ☐ NO CHANGE (SEE PRIOR REPORT)
☐ NEW BHA

16 TOOL DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

32538-1699

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

	PROJECT NO.	DATE	DAYS	DEPTH
1		8-16-81	15	2093

SIZE	FORMATION TYPE AND TOPS
2 TU 4 1/2	BASALT + CLAY

CSG SHOE DEPTH	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
3 13 3/8 @ 1,008	—	--	BARON Rig # 8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	SP
5	5	12 1/4	HT-533	15	15	15	INC	273	52 1/2	16.6	35	70	—	—	—	850	521	98	375				
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT.	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 am	66	40	10/7	3/12	10.0	12.0	2/32	TR	3	0	500			$965.45	$20,992.0

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8 LIGNITE - 8 SXS DRISPAC - 2 SXS CAUSTIC - 4 SXS

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV. 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'
10	1736	2°	N29W	Temp	132°									
11	1881	2°	N20W	Temp	134°									
12	2046	2 30	N15W	Temp	130°									
13														

HOURS	OPERATIONS IN SEQUENCE
14	
21 3/4	DRILL to 2093 @ 7 am 8-16-1981
2 1/4	SURVEY

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPOR

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-12-81	16	2475'

2 SIZE: 12¼" FORMATION TYPE AND TOPS: Basalt & Clay

3 SHOE DEPTH: 1331 @ 1,006 LINERS-OD TOP AND SHOE DEPTHS: — REPAIR DOWNTIME: CONTRACTOR AND RIG NO.: BARON DRLG RIG #8

4 BRIEF DESCRIPTION OF OPERATIONS

No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 125 °F Flowline

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2 LIN	SP
5	5	12¼	HTC 33	15	15	15	2475'	1255	90½	13.80	45	55/60	Ind.			850	562	204		5½	84	6"	C
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT.	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 AM	9.0	40	12/10	3/17	10.5	13.0	2/32	TR	3	—	400			$1561.25	$22,553.5

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV. 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100
10	2192	7°-15	N29W	Temp	142°									
11	2354	2°-	9.18.W	"	142°									
12														
13														

HOURS — OPERATIONS IN SEQUENCE

	HOURS	OPERATIONS IN SEQUENCE
14	3	Drill to 2140
	½	Circ Clean
	2	Short Trip to Wipe Hole - OK.
	3¾	Drilling
	1¼	Circ. Repair Geolograph Line & Survey @ 2192
	2	Drilling
	½	Circ. & Survey @ ~~2354~~ no Gas
	1½	Drilling
	½	Circ. & Survey @ 2354
	4	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
2 13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-18-81	17	2835'

SIZE: 14" | FORMATION TYPE AND TOPS: Volcanics & Clay

3 138' - 1,008' | LINERS - OD TOP AND SHOE DEPTHS | REPAIR DOWN TIME | CONTRACTOR AND RIG NO.: Baron Rig #8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: F Flow Line

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN.	SP
5	5	12¼	HTC J-33	15/32	15/32	15/32	2835	1615	94¾	17.04	45	55/60	Inc.			850	562			6½	85	6"	8.
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT.	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00	9.0	39	10/7	3/10	10.0	10.0	2/32	1/4	3		400			$1129.91	$23,683.

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'
10	2500	2° 15'	N28W	Temp. 138° F										
11	2654	2° 30'	N41W	Temp. 146° F										
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 1¾	Drilling
¾	Circ. & Survey @ 2500' Service Rig.
9¼	Drilling
¾	Circ. & Survey @ 2654
11½	Drilling
	FUEL 58"

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL & DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
("Wen" 1
(035-90064)
13/29N/15E MD B&M

2

3 13 3/8 Csg. - 1008'

PROJECT NO.	DATE	DAYS	DEPTH
	8-19-81	18	3193

SIZE	FORMATION TYPE AND TOPS
11 1/4"	Clay & Basalt

LINERS: OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
		Barron Drlg. Co. Rig 8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 133° F flow line

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE HTC	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2 LIN	SPM
5	5	12 1/4	J-33	15	15	15	3193	1973	116 1/2	16.93	40/45	55/60	I	NO		900	562	204		5 1/2"	85	6"	[illegible]
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 A.M.	9.0	41	12/7	4/18	10.0	9.8	2/32	1/4	4		500			$1544.59	$5,222.3

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100
10	2840	2° 30'	N33-W	Temp.	149°F									
11	2973	2° 15'	N23-W	"	153°F									
12	3118	2° 30'	N22-W	"	154°F									
13														

HOURS	OPERATIONS IN SEQUENCE
14 1 1/2	Drilling
1/2	Survey @ 2840
2 3/4	Drilling
1/4	Service Rig.
1 3/4	Drilling
3/4	Circ. & Survey @ 2973
8 1/4	Drilling
3/4	Circ. & Survey @ 3118'
2 1/2	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)

2 13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-20-81		3375

SIZE	FORMATION TYPE AND TOPS
7 1/4	Clay & Volcanics

3 1578' - 1008'

LINERS - OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
	1/2 hr.	Brown Rig #8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 150° F BHT 128° F flow line

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2 LIN	S
5	5	12 1/4	J-33	15	15	15	3251	2031	115 1/2	17.58	40/45	55/60	4	6	1/16	900	562 #	204		5 1/2	85	6"	
6	6	12 1/4	J-44	18	18	18	3375	124	10 3/4	11.53	40/45	55/60	I	N	G	675	715 #	3K		5 1/2	85	6"	

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 PM	65	41	12/10	3/10	10.0	12.2	2/32	1/4	4		300			$888.49	$26,116.3

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100
10	3221	3°	—	Temp -	155°									
11	~~3300~~	~~2° 45'~~		~~Temp~~	~~150°~~									
12	3273	2° 45'			150°									
13	3304	2° 45'			150°									

OPERATIONS IN SEQUENCE

HOURS	
14 3	Drilling
1/2	Survey @ 3221 & Serv. Rig.
2 1/2	FOOH - Change tools & Change bits.
1/2	Work on Remote Control for Hydril bag & Shaffer Gate
3	RIH
1	Run Temp. Survey & ream fm. 3220 to 3251
3/4	Drilling
1/4	Service Rig.
2 3/4	Drilling
1/2	Circ. & Survey @ 3271
2 3/4	Drilling
3/4	Circ. & Survey @

BOTTOM HOLE ASSEMBLY (BHA

15 ☐ NO CHANGE (SEE PRIOR REPOR

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 L HL POWER COMPANY
"Wen" 1
6 (035-90064)
P 13/29N/15E MD B&M

	PROJECT NO.	DATE	DAYS	DEPTH
		8-21-81	20	3677

2 6 SIZE 11 1/4" FORMATION TYPE AND TOPS: Clay & Volcanics

3 DI ... DEPTH: 13 3/8" - 1008' LINERS-OD TOP AND SHOE DEPTHS: REPAIR DOWNTIME: CONTRACTOR AND RIG NO.: Baron Rig #8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	SP
5	6	12 1/4	J-44	18	18	18	3677	426	29 3/4	14.31	40/45	55/60	Tw			675	715	K		6 1/2	35	6"	
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT.	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00	68	40	11/8	3/10	10.0	11.6	2/32	TR	3		300			$293.62	$27,402.8

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'
10	3335	—	—	Temp	150° F									
11	3500	2°		"	161° F									
12	3530	2° 30		"	148° F									
13														

HOURS	OPERATIONS IN SEQUENCE
14 1	Circ. & Survey @ 3335 Two Times, no Good
4	Drilling
1/2	Service Rig.
6	Drilling
3/4	Circ. & Survey @ 3500'
1 3/4	Drilling
1 1/4	Circ. & Survey - Two Times no Good
8 3/4	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

LOUIS E. CAPUANO, JR.

MORNING DRILLING REPORT

HL POWER COMPANY

LINE

1 L "Wen" 1
G (035-90064)
P 13/29N/15E MD B&M

2

PROJECT NO.	DATE	DAYS	DEPTH
	8-22-81	21	3843

SIZE	FORMATION TYPE AND TOPS
4"	Clay & Volcanics

DEEPEST CASING-OD SHOE DEPTH	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWN TIME	CONTRACTOR AND RIG NO.
13 3/8" - 1008'			Baron Rig 8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 132° F Flow Line BH Temp. 157°

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2 LIN	SP
5	6	12 1/4	HTC J-44	18	18	18	3843	592	46	12.86	40/45	55/60	Inc.			700	715 K			5 1/2	87	6"	8
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 AM	65	39	39/11	4/11	10.0	12.0	2/32	0	3		200			1218.32	28,628.2

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100
10	3770	2° 30'	N-14-W	Temp. 157° F										
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 4 1/2	Drilling
1/2	Started to survey & wire line broke. Service rig.
6 1/4	POOH, retrieve survey instrument & 200' wire. Gauge & Check tools & bit. Check BOP & RIH. Rig up Survey Equipment & take BH Temp. - 161° F
1/4	Ream tight hole from 3645' to 3715'
1/4	Circ. & unplug bit.
9 3/4	Drilling
3/4	Circ. & Survey @ 3770
1/4	Service Rig.
1 1/2	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL DESCRIP.	OD (IN.)	ID (IN.)	LENGTH (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

	PROJECT NO.	DATE	DAYS	DEPTH
		8-23-81	22	4136

	SHOE DEPTH	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
2	1475	12¼"	Clay & Volcanics	
3	13⅜" - 1008"			Baron Rig 8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 136° F flow line

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO 1 LIN	SPM	PUMP NO. LIN	S
5	6	12¼	HTC J-44	18	18	18	4136	885	66.75	13.25	40/45	55/60	I	2	C.	775	715	K		5½	90	6"	
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 AM	69	41	12/7	4/12	10.0	12.0	2/32	1/4	4		300			1375.41	30,000.-

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGL SEV 0/10
10	3902	2° -												
11	4055	—	—	Temp.	165°									
12	4086	—	—	"	166									
13														

HOURS	OPERATIONS IN SEQUENCE
14 5	Drilling
½	Survey @ Serv. rig @ 3902
12½	Drilling
¾	Circ. & Attempt to Survey @ 4055 no Good
2½	Drilling
¾	Circ. & ~~[illegible]~~ try to survey @ 4086 no Good
2	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL & DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE

1 HL POWER COMPANY "Wen" 1 (035-90064) 13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-24-81	23	4285

2

DI	SHOE DEPTH	SIZE	FORMATION TYPE AND TOPS	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO.
13 3/8"	1008'	12 1/4"	Clay + Volcanics			Brown Rig #8

3

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 133°F flow line BH Temp. 186° @ 4210

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	SPM
5	6	12 1/4	HTC J-44	18	18	18	4285	1034	83	12.45	40/45	55/60	I	nc.		775	715			6½	90	6	
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00AM	67	38	9/6	4/9	10.0	—	4/32	TR	3		200			51,132	30,521

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'
10	4180	2° 30'	N25W	Temp	182°?									
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 7½	Drilling
½	Attempt to Survey @ 4180 Survey wire line broke. Serv. Rig. & Grease CBS.
6	Trip to retrieve Survey Instrument. Gauge tools & bit & RIH to 4180.
½	Take temp. reading @ 4180° 186°F.
½	Ream & Circ. from 4180° to 4210
4	Serv. Rig & Drill
¼	Serv. Rig
4¾	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

LOUIS E. CAPUANO, JR.

MORNING DRILLING REPORT

LINE

1 HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

PROJECT NO.	DATE	DAYS	DEPTH
	8-25-81	24	4510

2 SIZE: 12 1/4 | FORMATION TYPE AND TOPS: Clay & Volcanics Basalt

3 DI: 13 3/8" | SHOE DEPTH: 1008' | LINERS-OD TOP AND SHOE DEPTHS | REPAIR DOWN TIME | CONTRACTOR AND RIG NO.: Barn Rig #5

4 BRIEF DESCRIPTION OF OPERATIONS

No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 137°F flow line BH Temp. 171°

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	SPM
5	6	12 1/4	HTC J-44	15	18	18	4510	1259	104 1/2	12.04	40/45	55/60	T	2	C	800	715			5 1/2	90		
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT.	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5:00 P.M.	67	38	10/5	2/10	10.0	14.4	2/32	1/1	3		200			597	[illegible]

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)
10	4303	2° 5'	N 12 W	Temp.	185° ?								
11	4457	2° 5'	N 10 W	Temp.	171°								
12													
13													

HOURS — OPERATIONS IN SEQUENCE

14

HOURS	OPERATIONS IN SEQUENCE
5	Drilling
1/2	Survey & Service rig @ 4303
15 1/2	Drilling
1 1/4	Circ. Service rig & Survey @
2	Drilling

BOTTOM HOLE ASSEMBLY

15 ☐ NO CHANGE ☐ NEW BHA

16 TOOL & DESCRIP | OD ID LENG IN IN FT

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE					
1	LEASE: HL POWER COMPANY "Wen" 1	PROJECT NO.	DATE 8-26-81	DAYS 25	DEPTH 4665
2	PROJECT: (035-90064) 13/29N/15E MD B&M	SIZE 12 1/4	FORMATION TYPE AND TOPS Clay & Volcanics		
3	SIZE: 13 3/8" - SHOE DEPTH: 1008'	LINERS - OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO. Baron Rig #8	

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: 133°F flow line

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE HTC	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2 LIN	SP
5	6	12 1/4	F-44	18	18	18	4620	1369	115	11.90	40/45	55/60	4	3	1/32	200	2153*	K		5 1/2	90	6"	
6	7	12 1/4	J-55	18	18	18	4665	45	2 3/4	16.36	40/45	55/60	TAC.			200	3-71*	KS		5 1/2	85	6"	

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	6 AM	68	38	10/1	2/12	10.5	12.4	2/32	1/4	4	—	200			1256	32,324

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV. D/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV D/100
10	4612	—	no Gyro	Temp.	172° F									
11	4620	2°15'	R	Temp.	185° 195° F									
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 5	Drilling
1/2	Service Rig & Check BOE
5 1/2	Drilling
1	Circ. for trip & Survey @ 4612 no Gyro
2	POOH
4	Magna-Glo all Drill Collars, Stabilizers & @ Subs.
2	RIH
1/2	Survey & take temp. @ 4620
3/4	Break Circ. & Ream from 4590 to 4620'
2 3/4	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL # DESCRIP.	OD (IN.)	ID (IN.)	LENGTH (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE		PROJECT NO.	DATE	DAYS	DEPTH
1	HL POWER COMPANY "Wen" 1 (035-90064)		8-27-81	26	4950
2	13/29N/15E MD B&M	SIZE 11 1/4"	FORMATION TYPE AND TOPS Volcanics		
3	15K - 1008	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME	CONTRACTOR AND RIG NO. Baron Rig #8	

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out: /

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. LIN	S
RB	7	12 1/4	Smith 3JS	18	18	18	1950	330	23 1/4	14.19	40/45	55/65	I	n	C.	750	371	K5		5 1/2	90	6"	
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COS
7	6:AM	68	38	10/5	2/14	10	14	2/32	1/4	4		200			864 cc	33,23

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGL SEV 0/10
10	4769	2° 15	N-5-W	Temp	176°									
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 9 1/2	Drilling
1	Circ. for survey & temp check @ 4769
1/4	Survey
1	Work pipe & wait for temp build up.
1/4	Run Thermometers.
12	Drilling

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPOR

☐ NEW BHA

16 TOOL # DESCRIP.	OD × ID × LENGTH (IN.) (IN.) (FT.)

MORNING DRILLING REPORT

LOUIS E. CAPUANO, JR.

LINE					
1	LEASE: HL POWER COMPANY "Wen" 1 (035-90064)	PROJECT NO.	DATE 8-28-81	DAYS 27	DEPTH 5110
2	DI 13/29N/15E MD B&M	SIZE 12¼"	FORMATION TYPE AND TOPS Volcanics & Granite		
3	1008'	LINERS - OD TOP AND SHOE DEPTHS	REPAIR DOWN TIME	CONTRACTOR AND RIG NO. Brown Rig #8	

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO. 2
5	7	12¼	Smith 3JS	18	18	18	5110	490	39¼	12.45	40/45	55/60				750	321	[illegible]		6½	80	
6																						

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUNL VIS	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	6:00 pm	8.8	39	11/4	2/12	10	12.6	9/32	TR	4		200			1277	34,515

MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

8

TOTAL COST TO DATE

9

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV. 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT DEPTH (VKB)	DOG SEV 0
10	4936	2°	N33W	Temp.	176°									
11	5079	2° 45	N44W	"	186°									
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 ½	Drilling
1	Circ. & Survey @ 4936'
15½	Drilling
1	Circ. Bottoms up for Sample & Temp. Check
2½	Survey @ 5079 & run Thermometers 3 times for temp. Check.
3½	Trip for bit Change.

BOTTOM HOLE ASSEMBLY (BHA)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL & DESCRIP	OD × ID × LENGTH (IN.) (IN.) (FT.)

Vicw. 707. 433.8437 707. 538-1699.

LOUIS E. CAPUANO, JR.

MORNING DRILLING REPORT

HL POWER COMPANY
"Wen" 1
(035-90064)
13/29N/15E MD B&M

	PROJECT NO.	DATE	DAYS	DEPTH
		8-29-81	28	5192

	SIZE	FORMATION TYPE AND TOPS
2	82 / 12¼"	GRANIT

	CASING-OD SHOE DEPTH	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWN TIME	CONTRACTOR AND RIG NO.
3	13¾" - 1008'		—	Baron Rig #8

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND 8THS 1	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. 1 LIN	SPM	PUMP NO LIN	S
5	8	12¼	K 44	18	18	20	1UC	82	17	7-2	40/45	55/60	—	—	—	750	550	104		5½	90		
6																							

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN.	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	5 pm	68	40	11/4	2/12	10	13-6	2/32	Tr	4	—	400	—	—	427	24,[illegible]

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV
10	5079	1 45	N-44-W											
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 4	RIH
1	TEMP SURVEY @ 5100 - 1:30 PM - 208° 215° - 1
	BROKE WIRE 2 MIL
6	TRIP
1	TEMP SURVEY @ 5100 - 6:15 PM - 216° - 225° - 17 hrs STATIC
1	TEMP SURVEY @ 5100 - 7:15 PM - 218° - 225° - 18 hrs STATIC
11	DRILL - 12¼ HOLE FR 5142 @ 7 AM - 8-29-81

BOTTOM HOLE ASSEMBLY (B.H.A.)

15 ☐ NO CHANGE (SEE PRIOR REPORT)

☐ NEW BHA

16 TOOL & DESCRIP.	OD x ID x LENGTH (IN.) (IN.) (FT.)

TGC 523-2961

LOUIS E. CAPUANO, JR.

MORNING DRILLING REPORT

LINE					
1	HL POWER COMPANY "Wen" 1 (035-90064) 13/29N/15E MD B&M	PROJECT NO.	DATE 8-30-81	DAYS 29	DEPTH 5304
2	SIZE 11 1/2 | 12 1/4	FORMATION TYPE AND TOPS GRANIT			
3	D ... DEPTH 10 3/8 @ 1008	LINERS-OD TOP AND SHOE DEPTHS	REPAIR DOWNTIME —	CONTRACTOR AND RIG NO BARON RIG # 8	

BRIEF DESCRIPTION OF OPERATIONS

4 No. of Comp. Running:

Cubic Feet per Min:

Compressor Pressure:

Mist:

Temperature Out:

BIT, WEIGHT, SPEED AND HYDRAULICS RECORD

	BIT NO.	SIZE	TYPE	NOZZLES 32NDS 1	2	3	DEPTH OUT	FEET	HOURS	FEET PER HOUR	BIT WT MLB	ROT. RPM	DULL COND. 8THS T	B	G	STAND PIPE PRESS.	CIRC RATE GPM	MIN. ANN. VEL. FPM	NOZ VEL FPS	PUMP NO. LIN	S-M	PUMP NO. LIN	S-M
5	8	HTC X44	12 1/4	18	18	20	5275	165	19		40/45	55/60	4	5	I	750	550	100	—	5 1/2	70		
6	9	12 1/4	SEC SE8	20	20	20	5304	29	3		30/35	60	1	2	I	700	550	104	—	—	—	—	

MUD PROPERTIES, MATERIALS ADDED AND COSTS

	SAMPLE TIME	WT	FUN'L VIS.	PV/YP	GELS	PH	FILTRATE CC/30MIN	CAKE 32NDS	% SAND	% SOLIDS	% OIL	CHLORIDES PPM			DAILY MUD COST	TOTAL MUD COST
7	6:00 AM	68	39	11/5	2/14	10	15	2/32	Tr	4		200			$ 108	$ 36,050

8 MUD MATERIALS AND QUANTITIES ADDED IN LAST 24 HOURS

9 TOTAL COST TO DATE

DIRECTIONAL SURVEYS

	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOG-LEG SEV 0/100'	MEASR'D INSTRMNT. DEPTH	DRIFT ANGLE	DIRECTION	COORDINATES		VERT. DEPTH (VKB)	DOGLEG SEV 0/100
10	5236	3°	N22W	Tcm?	178°									
11														
12														
13														

HOURS	OPERATIONS IN SEQUENCE
14 4	Drill to 5236
1	Survey @ 5236 - 3° N22W - Tcm? 178°
5	Drill to 5275
6	Trip for Bit Change
1	Ream F/ 5245 to 5275
3	Drill F/ 5275 to 5304.
	Loss Circ.
4	POH.
	NOTE
	Lost 30 BBL's Fluid @ 5236
	Complete Loss of Circ @ 5304

BOTTOM HOLE ASSEMBLY

15 [ ] NO CHANGE (SEE PRIOR REPORT)

[ ] NEW BHA

16 TOOL # DESCRIP.	OD x ID x LENGTH (IN)