

TABLE 2.3-20

SUMMARY OF COAL QUALITY ANALYSIS FOR ALL SOUTH HEART CORED HOLES

Hole Number	From	To	Thick	SEAM	Specific Gravity	Coal Quality - As Received									
						Moist	EQM	Ash	Sulfur	Btu	Na ₂ O	CaO	Sulfur Forms		
						(%)	(%)	(%)	(%)	(Btu/lb)	(%)	(%)	Organic	Pyritic	Sulfate
SH02-01C	36.6	53.8	17.2	D	1.26	42.85	39.08	9.44	1.34	6,001	7.94	NA	0.51	0.73	0.10
SH02-02C	139.7	157.1	17.4	D	1.24	42.60	41.38	9.19	0.91	5,978	NA	NA	NA	NA	NA
SH02-03C	116.4	134.0	17.6	D	1.24	42.45	38.71	8.86	1.22	6,080	NA	12.54	NA	NA	NA
SH02-04C	140.5	157.5	17.0	D	1.22	44.39	38.06	8.04	0.67	5,983	8.63	NA	0.35	0.29	0.03
SH02-05C	87.8	104.9	17.1	D	1.22	43.16	41.95	7.46	0.56	6,107	NA	NA	NA	NA	NA
SH02-07C	47.1	59.6	12.5	D	1.27	43.92	40.65	11.38	1.12	5,243	NA	14.56	NA	NA	NA
SH02-09C	48.6	66.8	18.2	D	1.24	42.35	37.97	7.35	0.48	6,246	6.24	NA	0.33	0.11	0.04
SH02-10C	69.8	86.9	17.1	D	1.25	42.57	38.78	8.48	1.29	6,113	NA	10.37	NA	NA	NA
SH02-11C	47.4	69.6	22.2	D	1.24	42.62	38.24	10.62	0.68	5,742	4.45	11.40	0.41	0.24	0.03
SH02-12C	48.5	67.5	19.0	D	1.26	41.21	36.59	9.83	1.97	6,079	2.60	15.62	0.62	1.27	0.08
SH02-13C	133.0	150.8	17.8	D	1.23	43.09	41.05	7.42	0.47	6,005	5.60	NA	0.31	0.10	0.06
SH02-14C	99.5	118.4	18.9	D	1.22	44.08	41.47	7.35	0.60	6,007	NA	12.02	NA	NA	NA
SH02-17C	49.9	68.0	18.1	D	1.24	42.37	39.47	8.58	0.54	6,068	5.00	12.75	0.33	0.18	0.03
SH02-21C	32.0	47.7	15.7	D	1.23	43.58	39.30	7.78	0.60	5,994	3.67	NA	0.32	0.24	0.04
SHOB-2C	28.6	44.8	16.2	D	1.26	43.31	41.11	7.10	0.60	6,025	2.08	14.86	0.39	0.14	0.07
SHOB-10C	63.7	80.9	17.2	D	1.28	40.56	43.50	11.70	0.74	5,852	2.67	9.93	0.47	0.24	0.03
SHOB-12C	80.4	100.4	20.0	D	1.24	42.14	42.81	7.83	0.64	6,183	8.14	13.94	0.39	0.19	0.06
SHOB-15C	86.0	102.7	16.7	D	1.27	41.46	38.56	9.30	1.24	6,133	2.89	11.45	0.66	0.54	0.04
SHOB-21C	54.5	74.3	19.8	D	1.25	41.82	39.89	8.18	0.99	6,194	7.09	13.23	0.51	0.45	0.03
SHOB-25C	60.5	74.0	13.5	D	1.26	43.17	43.13	8.49	1.14	5,650	2.74	15.73	0.46	0.24	0.44
SHOB-30C	53.7	73.9	20.2	D	1.25	41.58	43.41	10.90	0.86	5,904	3.39	9.90	0.44	0.39	0.03
SHOB-34C	56.0	74.6	18.6	D	1.27	41.29	37.33	8.59	0.86	6,149	2.23	13.58	0.43	0.39	0.04
SHOB-41C	46.3	62.5	16.2	D	1.27	41.74	38.95	9.11	1.84	6,140	1.20	1.45	0.80	0.99	0.05
SHOB-44C	47.5	63.3	15.8	D	1.25	43.19	37.58	7.63	0.73	6,062	4.07	13.77	0.26	0.43	0.04
SHOB-47C	40.9	55.3	14.4	D	1.26	42.37	39.23	8.84	1.06	5,963	3.04	10.82	0.43	0.59	0.04
SHMW-10-OB	39	56	17.0	D	1.24	42.41	37.35	6.89	0.65	6,241	3.06	15.6	0.38	0.24	0.03
SHMW-05D	153	174	21.0	D	1.19	40.84	35.94	8.85	1.16	6,208	7.22	11.26	0.79	0.34	0.03
SHMW-06D	55	68	13.0	D	1.23	40.48	35.8	8.07	1.12	6,192	3.73	12.63	0.52	0.47	0.13
SHMW-10D	38	54.5	16.5	D	1.24	41.14	39.24	8.88	0.64	6,080	2.66	12.04	0.41	0.2	0.03
SHMW-03HTB	62.3	76	13.7	D	1.26	41.3	38.54	8.28	1.52	6,163	4.52	12.78	0.84	0.64	0.04
SHMW-08HTB	114	131.5	17.5	D	1.21	42.9	41.75	8.39	0.98	5,980	8.46	12.7	0.53	0.42	0.03
SH-07-01	42.25	56.2	14.0	D	1.25	42.5	47.75	7.68	0.54	6,035	5.59	14.45	0.25	0.19	0.1
SHOB-101C	75	91.5	16.5	D	1.25	42.94	42.1	8.69	0.93	5,954	7.63	11.88	0.4	0.47	0.06
SHOB-103C	76	92.5	16.5	D	1.26	40.9	40.76	9.13	0.86	6,152	7.15	12.35	0.41	0.41	0.04
SHOB-104C	82.5	100.2	17.7	D	1.25	41.78	41.94	8.42	0.72	6,091	4.67	12.68	0.47	0.2	0.05
SHOB-106C	73.9	91.9	18.0	D	1.23	42.61	40.23	7.94	0.73	6,064	8.24	13.71	0.48	0.19	0.06
SHOB-107C	86	107	21.0	D	1.22	42.69	48.73	8.74	1.21	6,035	8.18	13.01	0.55	0.59	0.07
SHOB-108C	66	85	19.0	D	1.23	43.39	42.88	7.27	0.82	6,082	8.26	14.75	0.4	0.33	0.09
SHOB-114C	49.5	62.3	12.8	D	1.25	43.99	41.5	7.26	0.54	5,688	2.9	18.46	0.31	0.06	0.17
SHOB-116C	40.2	51.5	11.3	D	1.25	42.32	43.37	8.54	1.74	6,120	1.6	13	0.72	0.92	0.1
SHOB-121C	51	67.4	16.4	D	1.26	41.82	41	8.63	0.88	6,100	1.02	19.13	0.42	0.42	0.04
SHOB-122C	23	43.7	20.7	D	1.24	43.06	43.93	7.43	0.65	5,987	1.41	18.2	0.33	0.21	0.11
SHOB-125C	103.4	122.3	18.9	D	1.24	41.57	44.55	8.73	0.89	6,118	5.02	12.65	0.29	0.51	0.09
SHOB-130C	25.4	41	15.6	D	1.25	42.83	42.37	8.56	1.03	6,044	1.11	18.42	0.52	0.4	0.11
MIN			11.3		1.19	40.48	35.80	6.89	0.47	5,243	1.02	1.45	0.25	0.06	0.03
MAX	D SEAM SUMMARY		22.2		1.28	44.39	48.73	11.70	1.97	6,246	8.63	19.13	0.84	1.27	0.44
MEAN			17.1		1.25	42.39	40.63	8.54	0.93	6,028	4.63	13.18	0.46	0.39	0.07
MEDIAN			17.2		1.25	42.48	40.71	8.52	0.86	6,066	4.26	12.78	0.43	0.37	0.05
SHOB-2C	184.8	197.2	12.4	HT Butte	1.25	42.13	38.51	9.12	1.37	6,129	6.25	8.06	0.63	0.70	0.04
SHMW-03HTB	198.0	213.6	15.6	HT Butte	1.14	42.10	38.71	6.28	1.07	6,262	10.49	13.10	0.64	0.39	0.04
SHMW-08HTB	286.1	296.6	10.5	HT Butte	1.21	42.02	39.74	7.38	1.16	6,334	9.79	11.48	0.58	0.54	0.04
SHOB-21C	217.3	230.0	12.7	HT Butte	1.23	41.62	37.95	5.87	0.97	6,574	8.92	13.89	0.56	0.37	0.04
SHOB-47C	185.4	198.6	13.2	HT Butte	1.22	42.92	38.34	6.09	0.77	6,383	9.53	13.34	0.40	0.36	0.01
MIN			10.5		1.14	41.62	37.95	5.87	0.77	6,129	6.25	8.06	0.40	0.36	0.01
MAX	HT BUTTE SEAM SUMMARY		15.6		1.25	42.92	39.74	9.12	1.37	6,574	10.49	13.89	0.64	0.70	0.04
MEAN			12.9		1.21	42.16	38.65	6.95	1.07	6,336	9.00	11.97	0.56	0.47	0.03
MEDIAN			12.7		1.22	42.10	38.51	6.28	1.07	6,334	9.53	13.10	0.58	0.39	0.04
SHOB-15C	14.6	20.5	5.9	E	1.25	44.23	39.46	8.32	2.01	5,908	6.36	12.23	0.81	1.12	0.08
SHOB-104C	11.0	17.0	6.0	E	1.29	47.66	42.42	10.22	1.43	4,196	4.38	16.29	0.46	0.06	0.91
MIN			5.9		1.22	42.10	38.51	6.28	1.07	5,908	6.36	12.23	0.58	0.39	0.04
MAX	E SEAM SUMMARY		6.0		1.29	47.66	42.42	10.22	2.01	5,908	6.36	16.29	0.81	1.12	0.91
MEAN			6.0		1.27	45.95	40.94	9.27	1.72	5,052	5.37	14.26	0.64	0.59	0.50
MEDIAN			6.0		1.27	45.95	40.94	9.27	1.72	5,052	5.37	14.26	0.64	0.59	0.50
SHOB-101C	25.8	27.9	2.1	E1	1.25	43.28	39.29	8.51	2.30	5,999	1.59	11.78	0.83	1.31	0.16
SHOB-103C	28.0	30.0	2.0	E1	1.28	39.91	35.50	12.60	2.23	5,971	3.40	7.59	1.01	1.03	0.19
MIN			2.1		1.25	43.28	39.29	8.51	1.72	5,052	1.59	11.78	0.64	0.59	0.16
MAX	E1 SEAM SUMMARY		2.1		1.28	43.28	39.29	12.60	2.30	5,999	3.40	11.78	1.01	1.31	0.19
MEAN			2.1		1.27	41.60	37.40	10.56	2.27	5,985	2.50	9.69	0.92	1.17	0.18
MEDIAN			2.1		1.27	41.60	37.40	10.56	2.27	5,985	2.50	9.69	0.92	1.17	0.18

% = weight percent

EQM = Equilibrium Moisture

CaO = Calcium Oxide

Na₂O = Sodium Oxide

BTU = British Thermal Units

BTU/lb = British Thermal Unit per pound