

GRADIENT HOLE INFORMATION CHART

[illegible]

11-13-93
11-14-93
11-15-93
11-16-93
11-17-93
11-18-93
11-19-93
11-20-93

GRADIENT HOLE INFORMATION CHART

FLOWLINE			UNS TABLIZED		MUD					
DEPTH	IN	OUT	BHT		VIS		WEIGHT		PIT LEVEL	
			DEPTH	TEMP	IN	OUT	IN	OUT	LOSS	GAIN
			508	110°					10/L	
			558	112°					10/L	
			605	92°					20%	
			653	90°					20%	
		85°	705	112°	37		8.5		10%	
754	110°	90	754	122°	36		8.5		20%	10/G
788	110°	90	802	116°	39		8.5			
	70	80	864	130°	37		8.6			
901	90	100	901	130°	38		8.5			
957	100	95	957	130°	38		8.5		5%	10-12-93
1004	95	95	1004	140°	—		—		5%	
1055	95	95	1055	148°	38		8.6		—	
1105	95	95	1105	140°	34		8.6		5%	10-14-93
1156	—	—	1156	160°						
1205	—	—	1205	160°	35		8.5		Less Than	5%
1245	85	180	1245	146°	36		8.7		11	11
			1307	150°	36		8.7		11	11
			1361	150°	36		8.6		0	—
1380	90°	105°					8.7		0	—
1390	90°	110°							0	—
1400	90°	110°	1400	140°	39		8.6		0	—
1451	80°	110°	1451	150°	40		8.7		0	10-17-93
1500	75°	110°	1500	150°	39		8.7		0	
1555	90	110°	1555	152°	38		8.5		0	
1600	75	110°	1600	150°	37		8.5		0	10-18-93
1658	70	105	1658	155°	37		8.7			
1705	80	110	1705	158°	40	36	8.8			
1756	95	110	1756	156°	38	38	8.8			
1804	85	105	1804	158°	37	37	8.8		0	10-19-93
1860	85	105	1860	158°	37	37				
			1900	159°						
1940	100	115	1940	150°	45	45	8.8			10-23-93
			1970	162°	43	40	8.6	8.7		
2001			2001	162°	—	—	8.6	8.7		10-27-93
2051	95	110	2051	165	40	38	8.7	8.7		10-29-93
2120	95	110	2120	168	40	39	8.7	8.7		
2150	95	110	2151	170	41	39	8.7	8.8		10-31-93
2200	87	110	2200	168	41	40	8.8	8.9		
2250	85	100	2250	175	39	40	8.7	8.6		11-1-93
2306	95	112	2306	164	40	—	8.8	—		11-3-93
2322	95	112	2322	154	40	—	—	—		11-4-93
2360	75	90	2360	172°	39	34	8.5	8.5	20 gal/hr	11-6-93
2400	65	80	2400	168°	39	40	8.5	8.5	20 gal/hr	11-6-93
2450	65	75	2450	154°	35	38	8.5	8.5	20 gal	11-8-93
2512	65	75	2512	170°	43	42	8.6	8.6		
2550	65	75	2550	180°	40	40	8.6	8.6	No Loss	11-12-93
2600	75	85	2600	176°	39	37	8.7	8.7	No Loss	11

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			508	110°					10/L	
			558	112°					10/L	
			605	92°					20%	
			653	90°					20%	
		85°	705	112°	37		8.5		10%	
758	110°	90	758	122°	36		8.5		20%	10/G
788	110°	90	802	116°	39		8.5			
	70	80	864	130°	37		8.6			
901	90	100	901	130°	38		8.6			
957	100	95	957	130°	38		8.5		5%	10-12-93
1004	95	95	1004	140°	—		—		5%	
1055	95	95	1055	148°	38		8.6		—	
1105	95	95	1105	140°	34		8.6		5%	10-14-93
1156	—	—	1156	160°						
1204	—	—	1204	160°	35		8.5		Less Than	5%
1245	85	180	1245	146°	36		8.7		11	11
			1307	150°	36		8.7		11	11
			1361	150°	36		8.6		—	—
1380	90°	105°					8.7		—	—
1390	90°	110°								
1400	90°	110°	1400	140°	34		8.6		—	—
1451	80°	110°	1451	150°	40		8.7		—	10-17-93
1500	75°	110°	1500	150°	39		8.7		—	
1555	80	110°	1555	152°	38		8.5		—	
1600	75	110°	1600	150°	37		8.5		—	10-18-93
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2322	95	112	2322	154	40	—	—	—		11-4-93
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