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Schlumberger Anadrill

MDC Operations
9900 West Interstate 20
Midland, Texas 79706
Phone (915) 563-3057
Fax (915) 563-3059

May 2, 1999

Oil Conservation Division
District I
P.O. Box 1960
Hobbs, New Mexico 88241-1960

Re: KCS Medellion
Well: Shugart West 24 Federal G #2

Eddy Co, NM
API # 30-015-31742

Enclosed, please find the original and one copy of the survey performed on the referenced well by Anadrill, a division of Schlumberger Technology Corporation. Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Paul Mata MWD I	#01	4000-8425	6-25-01 - 7-04-01	MWD

A certified plat on which the bottom hole is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Sincerely,

24-18-30 AT.J

Cc: KCS Medellion

Enclosures: 2

Schlumberger | Anadrill

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State of New Mexico
County of Lea

I, Paul Mata, certify that; I am employed by Anadrill, a division of Schlumberger Technology Corporation; that I did on the day's of 6-25-01 through 7-04-01 conduct or supervise the taking of MWD surveys from a depth of 4000 feet to a depth of 8425 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Anadrill, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of KCS Medellion, for the Shugart West 24 Federal G#2, API # 30-015-31742, in Eddy CO, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Anadrill, a division of Schlumberger Technology Corporation.

Paul Mata,
MWD I

Proposed Well Profile

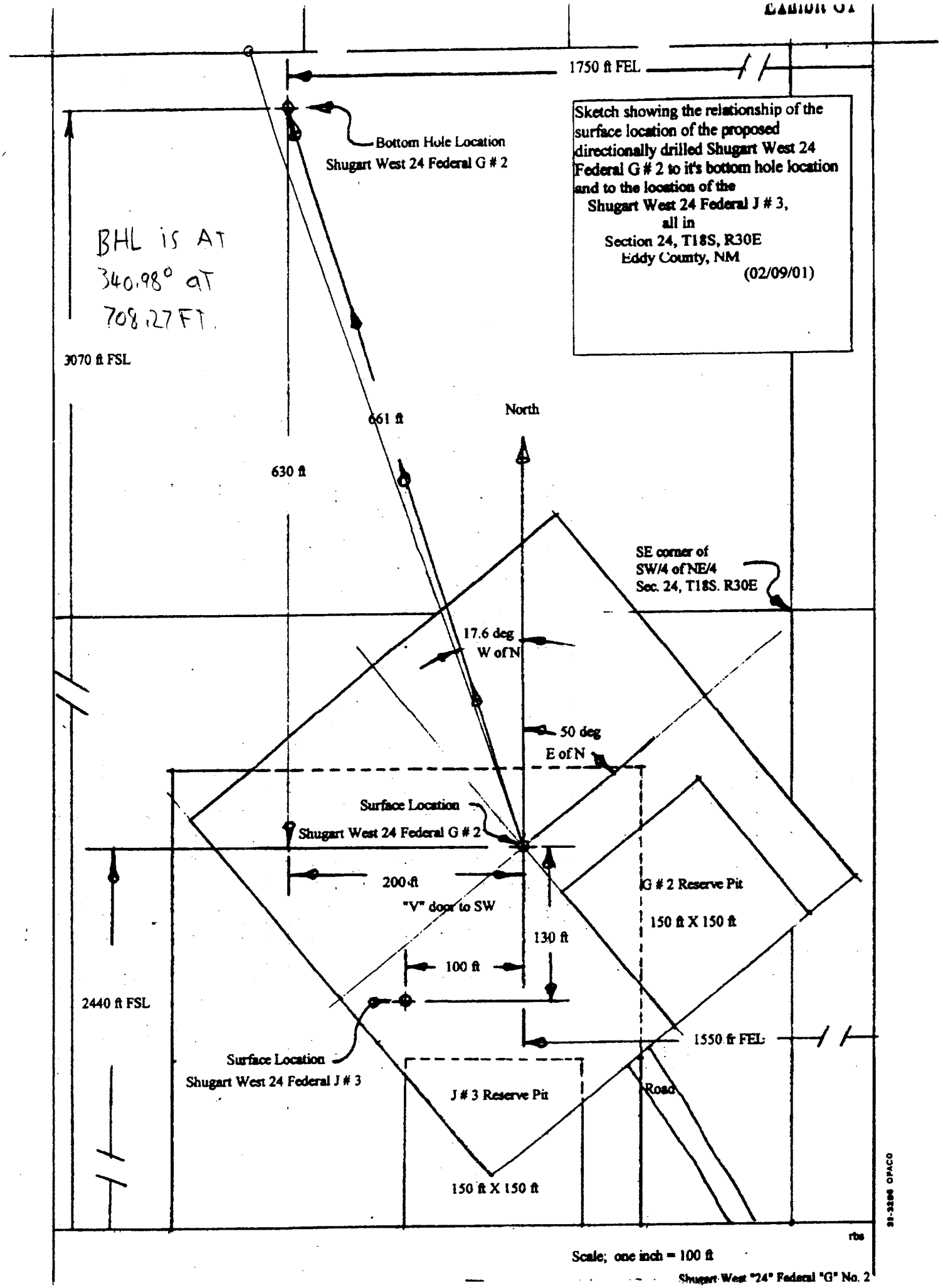
Report Date:	July 5, 2001	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	KCS Medallion Resources, Inc.	**Vertical Section Azimuth:**	342.390°
Field:	Eddy Co.	**Vertical Section Origin:**	N 0.000 ft, E 0.000 ft
Structure / Slot:	Shugart West 24 Federal G #2 / Shugart West 24 Federal G #2	**TVD Reference Datum:**	KB
Well:	Shugart West 24 Federal G #2	**TVD Reference Elevation:**	0.0 ft relative to
Borehole:	Shugart West 24 Federal G #2	**Sea Bed / Ground Level Elevation:**	0.000 ft relative to
UWI/API#:		**Magnetic Declination:**	9.022°
Proposal Name / Modified Date:	accual / July 5, 2001	**Total Field Strength:**	49780.549 nT
Tort / AHD / DDI /ERD ratio:	43.355° / 3073.80 ft / 5.128 / 0.368	**Magnetic Dip:**	60.579°
Grid Coordinate System:	NAD27 New Mexico State Planes, Eastern Zone, US Feet	**Declination Date:**	July 05, 2001
Location Lat/Long:	N 32 30 0.000, W 104 10 0.000	**Magnetic Declination Model:**	BGGM 2000
Location Grid N/E Y/X:	N 545652.917 ftUS, E 551383.485 ftUS	**North Reference:**	True North
Grid Convergence Angle:	+0.08955012°	**Total Corr Mag North -> True North:**	+9.022°
Grid Scale Factor:	0.99991211	**Local Coordinates Referenced To:**	Structure Reference Point

Station ID	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSec (ft)	N/-S (ft)	E/-W (ft)	Closure (ft)	at Azim (°)	DLS (°/100ft)	TF (°)
Tie-In	3986.00	0.79	330.7	3985.30	52.84	53.33	-6.64	53.74	352.90	0.00	-5.5MTF
	4032.00	1.80	354.5	4031.29	53.86	54.33	-6.86	54.76	352.80	2.44	-7.1MTF
	4063.00	1.50	352.9	4062.28	54.73	55.21	-6.96	55.65	352.81	0.98	-6.3MTF
	4093.00	1.60	353.7	4092.26	55.53	56.02	-7.06	56.46	352.82	0.34	-24.9MTF
	4124.00	2.10	335.1	4123.25	56.52	56.96	-7.34	57.44	352.66	2.50	-24.9MTF
	4155.00	2.60	335.1	4154.22	57.78	58.12	-7.88	58.65	352.28	1.61	-24.6MTF
	4186.00	3.00	335.4	4185.18	59.28	59.49	-8.51	60.10	351.86	1.29	-15.6MTF
	4217.00	2.70	344.4	4216.15	60.81	60.93	-9.05	61.60	351.56	1.74	-21.5MTF
	4279.00	4.10	338.5	4278.04	64.49	64.40	-10.25	65.21	350.96	2.32	-21.2MTF
	4341.00	4.90	338.8	4339.84	69.34	68.93	-12.02	69.97	350.11	1.29	-18.7MTF
	4404.00	5.60	341.3	4402.58	75.10	74.35	-13.98	75.66	349.35	1.17	-56.7
	4466.00	5.80	338.4	4464.27	81.25	80.13	-16.10	81.73	348.64	0.57	31.3
	4525.00	6.10	340.1	4522.96	87.35	85.85	-18.27	87.77	347.99	0.59	-20.5

4585.00	6.80	337.9	4582.58	94.08	92.14	-20.69	94.43	347.35	1.24	59.8
4647.00	6.90	339.3	4644.13	101.46	99.02	-23.39	101.75	346.71	0.31	63.3
4709.00	7.30	345.0	4705.66	109.11	106.31	-25.72	109.38	346.40	1.31	-38.0
4771.00	7.70	342.7	4767.13	117.20	114.08	-27.98	117.46	346.22	0.81	-44.5
4834.00	8.50	337.6	4829.50	126.06	122.42	-31.01	126.28	345.79	1.71	19.0
4896.00	9.00	338.7	4890.78	135.47	131.17	-34.51	135.64	345.26	0.85	-11.7
4957.00	10.10	337.4	4950.93	145.56	140.56	-38.30	145.68	344.76	1.84	-1.6
5019.00	11.50	337.2	5011.83	157.13	151.27	-42.79	157.21	344.21	2.26	61.4
5081.00	11.60	338.1	5072.58	169.50	162.75	-47.51	169.55	343.73	0.33	18.2
5144.00	12.60	339.6	5134.18	182.68	175.07	-52.26	182.71	343.38	1.66	5.4
5207.00	13.60	340.0	5195.54	196.94	188.47	-57.19	196.96	343.12	1.59	2.3
5270.00	14.20	340.1	5256.69	212.07	202.70	-62.36	212.07	342.90	0.95	45.0
5334.00	14.40	340.9	5318.71	227.86	217.60	-67.63	227.87	342.73	0.44	-14.1
5428.00	14.50	340.8	5409.73	251.31	239.76	-75.33	251.31	342.56	0.11	-90.0
5522.00	14.50	340.4	5500.74	274.84	261.96	-83.14	274.84	342.39	0.11	-135.2
5616.00	14.40	340.0	5591.77	298.28	284.03	-91.09	298.28	342.22	0.15	0.0
5711.00	15.30	340.0	5683.59	322.60	306.91	-99.42	322.61	342.05	0.95	-7.6
5805.00	15.50	339.9	5774.22	347.54	330.36	-107.98	347.55	341.90	0.21	-159.0
5899.00	14.90	339.0	5864.93	372.15	353.43	-116.62	372.18	341.74	0.69	105.3
5994.00	14.80	340.5	5956.76	396.47	376.27	-125.05	396.51	341.62	0.42	175.1
6088.00	13.70	340.9	6047.86	419.60	398.11	-132.70	419.64	341.57	1.17	145.3
6151.00	13.40	341.8	6109.11	434.36	412.10	-137.42	434.40	341.56	0.58	-149.0
6245.00	13.10	341.0	6200.61	455.90	432.52	-144.29	455.95	341.55	0.37	122.4
6340.00	12.80	343.2	6293.19	477.19	452.77	-150.84	477.23	341.57	0.61	-90.0
6403.00	12.80	342.8	6354.63	491.14	466.12	-154.92	491.19	341.62	0.14	34.1
6466.00	13.00	343.4	6416.04	505.21	479.57	-159.01	505.25	341.66	0.38	-12.9
6529.00	13.20	343.2	6477.40	519.48	493.25	-163.11	519.52	341.70	0.33	-122.9
6592.00	13.00	341.8	6538.76	533.76	506.87	-167.40	533.80	341.72	0.60	180.0
6655.00	12.90	341.8	6600.15	547.88	520.28	-171.81	547.92	341.73	0.16	161.4
6717.00	11.70	343.8	6660.73	561.08	532.89	-175.73	561.12	341.75	2.05	-125.6
6780.00	11.60	343.1	6722.43	573.80	545.09	-179.35	573.84	341.79	0.27	111.7
6843.00	11.50	344.4	6784.16	586.41	557.20	-182.88	586.44	341.83	0.44	-159.0

	6906.00	11.10	343.6	6845.94	598.75	569.06	-186.28	598.78	341.87	0.68	171.6
	6969.00	10.60	344.0	6907.81	610.61	580.45	-189.59	610.63	341.91	0.80	-144.3
	7032.00	10.40	343.2	6969.75	622.09	591.46	-192.83	622.10	341.94	0.39	170.3
	7095.00	9.90	343.7	7031.77	633.19	602.11	-196.00	633.20	341.97	0.81	-149.6
	7158.00	9.70	343.0	7093.85	643.91	612.38	-199.07	643.92	341.99	0.37	-160.7
	7221.00	8.60	340.4	7156.05	653.92	621.89	-202.20	653.94	341.99	1.86	173.6
	7284.00	8.10	340.8	7218.38	663.07	630.52	-205.24	663.08	341.97	0.80	-179.2
	7347.00	7.20	340.7	7280.82	671.45	638.44	-208.01	671.47	341.95	1.43	155.9
	7409.00	6.50	343.5	7342.37	678.84	645.47	-210.29	678.86	341.96	1.25	-129.3
	7473.00	5.90	335.7	7406.00	685.73	651.94	-212.67	685.75	341.93	1.61	159.7
	7536.00	4.90	340.1	7468.72	691.64	657.42	-214.92	691.66	341.90	1.72	-26.0MTF
	7599.00	4.30	334.0	7531.52	696.66	662.08	-216.87	696.69	341.86	1.23	-103.5MTF
	7725.00	1.70	256.5	7657.37	701.47	665.89	-220.76	701.53	341.66	3.39	-85.8MTF
	7788.00	1.80	274.2	7720.34	701.90	665.74	-222.65	701.99	341.51	0.87	-79.3MTF
	7851.00	1.50	280.7	7783.32	702.66	665.97	-224.45	702.77	341.37	0.56	-117.4MTF
	7914.00	0.30	242.6	7846.31	703.03	666.04	-225.41	703.15	341.30	2.03	-56.3MTF
	7977.00	0.60	303.7	7909.31	703.26	666.15	-225.83	703.39	341.27	0.83	-26.0MTF
	8071.00	0.70	334.0	8003.30	704.21	666.94	-226.49	704.35	341.24	0.38	-65.3MTF
	8166.00	1.10	294.7	8098.29	705.40	667.84	-227.57	705.55	341.18	0.75	-50.7MTF
	8228.00	0.50	309.3	8160.28	706.02	668.26	-228.32	706.19	341.14	1.01	-74.0MTF
	8323.00	1.10	286.0	8255.27	706.88	668.78	-229.52	707.07	341.06	0.71	-48.4MTF
	8383.00	0.80	311.6	8315.26	707.55	669.21	-230.39	707.76	341.00	0.85	-48.4MTF
Projected to Bit	8425.00	0.80	311.6	8357.26	708.06	669.60	-230.82	708.27	340.98	0.00	0.0MTF

Survey Error Model: *(No Error Model Selected)*


1750 ft FEL
Bottom Hole Location
Shugart West 24 Federal G # 2
Sketch showing the relationship of the surface location of the proposed directionally drilled Shugart West 24 Federal G # 2 to it's bottom hole location and to the location of the Shugart West 24 Federal J # 3, all in Section 24, T18S, R30E Eddy County, NM (02/09/01)
BHL is AT
340.98° aT
708.27 FT.
3070 ft FSL
661 ft
630 ft
North
SE corner of SW/4 of NE/4 Sec. 24, T18S. R30E
17.6 deg W of N
50 deg E of N
Surface Location
Shugart West 24 Federal G # 2
200 ft
"V" door to SW
G # 2 Reserve Pit
150 ft X 150 ft
130 ft
100 ft
2440 ft FSL
1550 ft FEL
Surface Location
Shugart West 24 Federal J # 3
J # 3 Reserve Pit
Road
150 ft X 150 ft
rbs
Scale; one inch = 100 ft
Shugart West "24" Federal "G" No. 2