Exhibit "E"
Eight Point Compliance Program
KCS Medallion Resources, Inc.
7130 South Lewis Avenue, Suit 700
Tulsa, OK 74139-5489

Drilling Plan

Buffalo Fed Com No. 1 Lease No. W/2 SW/4: NM NM 101114
660 ft FSL & 660 ft FWL
Sec. 9, T19S, R33E N. M. P. M.
Lea Co. New Mexico

1. Estimated Tops of Geologic Markers

Horizon	Depth ft	Sea Level Datum
Surface	0	+3,667
Anhydrite	1,400	+2,267
B/Salt	3,150	+517
Yates	3,350	+317
7-Rivers	3,700	-33
Queen	4,300	- 663
Penrose	4,550	- 883
Delaware Sd.	5,300	-1,633
Bone Springs	7,725	-4,058
Wolfcamp	10,925	-7,258
Strawn	12,035	-8,368
Atoka	12,480	-8,813
Morrow	13,000	-9,333
Barnett	13,675	-10,008
Total Depth	13,700	-10,033

2. Estimated Depths of Water, Oil or Minerals

A. Fresh Water

It is possible that fresh water zones could be encountered at depths up to 400 ft. Any zones encountered will be protected by the 13 5/8" casing set at 450 ft and cemented to the surface.

B. Oil and Gas

Morrow gas is the primary objective of this well but it is possible that shows of gas or oil may be encountered in other zones. Potentially productive horizons, as indicated by samples and/or electric logs will be protected by 4½" casing with cement up to 500 ft above the upper-most zone of interest and with a minimum fill up to at least 500 ft above the top of the Wolfcamp.

2. The Operators Minimum Specifications for Pressure Control

A. Exhibit F is a schematic diagram of the blowout prevention equipment. The annular BOP and rams will be hydraulically tested to 2750 psig (70% of the internal yield strength of the 8 5/8" 32

lb/ft, J55 casing) after nippling up and after any use under pressure. Annular and pipe rams will be operationally tested each 24 hr period and blind rams will be tested each time the drill pipe is out of the hole. Accessories to the BOP will include a floor safety valve and a choke manifold with a pressure rating equivalent to the BOP stack

B. Testing Procedures:

1. All casing below the surface string will be tested to .22 psig/ft or to 1500 psig, whichever is greater, but not to exceed 70% of the internal yield strength of the casing.

2. All ram type preventers will be tested to the rated working pressure of the stack or to 70% of the minimum internal yield of the casing , whichever is less.

3. Tests will be performed at the time of installation, and prior to drilling out of the casing shoe, and at least every 30 days.

4. The intermediate casing string will be tested prior to drill out by drilling cement to within 15-20 ft of the shoe, raising the drill string off bottom, closing the pipe rams, and raising the casing pressure to the desired pressure.

5. The production string will be tested prior to drill out or perforating by pressuring to the desired pressure.

D. No over pressured formations are expected to be encountered, however drilling fluid levels will be visually monitored while circulating the reserve pit. A flow rate monitor will be installed in the mud flow line and fluid level indicators will be installed on the steel circulating tanks.

4. Proposed Casing and Cementing Programs

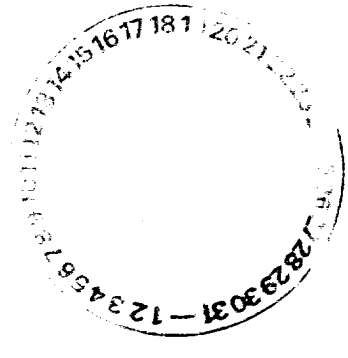
A. All casing below the conductor will either be new and manufactured to API specifications or used and reconditioned to Grade "A" specifications. Minimum casing specifications are shown below.

String	Size	Wt/ft	Grade	Thread Type	Setting Depth	Condition
1.	20"	52.73	Sch 10	NA	40' to 80'	Used, Grd. A
2.	13 3/8"	48#	H40	8 rnd, ST & C	450'	New or Used, Grd. A
3.	8 5/8"	32#	J55	8 rnd, ST & C	4,700'	New or Used, Grd. A
	8 5/8"	32#	HCK55	8 rnd, ST & C	4,700' to 5,200'	New or Used, Grd. A
4.	4 ½	11.6#	S95	8 rnd, BT & C	3,020'	New or Used, Grd. A
	4 ½	11.6#	N80	8 rnd, LT & C	3,020' to 9,700'	New or Used, Grd. A
	4 ½	11.6#	HCN80	8 rnd, LT & C	9,700' to 13,700'	New or Used, Grd. A

B. Cementing

1. The hole for the conductor casing will be cut with a rat hole digger and sufficient hole will be cut to drill into consolidated sediments. Since the casing comes in 40 ft lengths, either 40ft or 80 ft of hole will be drilled depending on the consolidation of the underlying sediments. After drilling is completed casing will be set on bottom and cemented to the surface with ready-mix cement.

2. The 13 3/8" surface casing will be set at approximately 450 ft in 17 ½" hole



using a guide shoe, insert float, and at least three centralizers. It will be cemented to the surface with 100% excess slurry consisting of a lead slurry of 140 sacks of Class 'H' cement + 3% D79 + 0.25pps of D29 mixed with 14.14 gal/sk of water for a weight of 12.0 ppg and a yield of 2.39 cf/sack, followed by a tail slurry of 195 sacks of Class 'C' Cement + 2% S1 mixed with 6.3 gal/sk of water for a weight of 14.8 ppg and a slurry yield of 1.34 cu ft/sack. 1" pipe and a 100 sack top out system will be available in the event that the cement does not circulate.

3. The 8 5/8" intermediate casing will be set at approximately 5200 ft in 11" hole using a guide shoe, a float collar, and at least 10 centralizers. The slurry design will provide 100% excess for a cement top of 2500 ft and will include a lead slurry of 755 sacks of class 'H' cement + 3% D79 + 0.25 ppg of D29 mixed with 14.14 gal/sk of water for a weight of 12.0 ppg and a yield of 2.39 cf/sack followed by a tail slurry of 200 sacks of Class 'C' Cement + 1% S1 mixed with 6.3 gal/sk of water for a weight of 14.8 ppg and a yield of 1.33 cf/sack. A Topout system with 100 sks of class 'H' neat mixed at 16.4 ppg will be available if necessary.

3. If run, the 4 ½" production string will be set at about 13,700 ft in 7 7/8" hole. A float shoe, a float collar, and sufficient centralizers to centralize the casing through all prospective pay zones will be run. Sufficient slurry will be pumped to cover the uppermost prospective zone with at least 500 ft of cement, or at a minimum to cover the Wolfcamp zone with 500 ft of cement using at least 25% excess slurry. Assuming a Morrow completion with casing set at 13,700 ft and a desired cement top of 10,400 ft (Wolfcamp top estimated at 10,925 ft), the casing would be cemented with 695 sacks of 50:50 Poz:Class 'H' Cement: + 5% D44(bwow) + 2% D20 + 0.2% D59 + 0.3% D13, mixed with 6.32 gal/sk of water for a weight of 14.2 ppg and a yield of 1.35 cf/sack. The slurry would be preceded by 20 bbls of CW-7 Chemical Wash.

4. Casing seats shown, except for the 4 ½ in string, are at minimum depths and cement volumes are approximate. Actual volumes may vary depending upon hole conditions and actual casing setting depths.

5. Drilling Fluid Program

A. Fluid Characteristics by Interval

1. 0 to 450 ft, Fresh water, native mud, gel, lime, caustic soda, & LCM.

Weight	8.6 to 9.0 ppg
Viscosity	27 - 36 sec/qt
Fluid Loss	NC
ph	9.0 - 9.5
LCM	as needed

2. 450 ft to 5,200 ft, Brine/ water, native mud, gel, caustic soda, & LCM.

Weight	9.6 to 10.0 ppg
Viscosity	28 to 32 sec/qt
Fluid loss	NC
ph	9.0 - 9.5


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

LCM	as needed

3. 5,200 to 10,500, Brine, fresh water, native mud, gel, polymers, and lime

Weight	9.6 - 10.0 ppg
Viscosity	27 to 30 sec/qt
Fluid loss	NC
ph	9.0 - 9.5
LCM	as needed

4. 10,500 to 13,700, Brine, fresh water, polymer, gel, , soda ash, caustic soda, and lime

Weight	9.6 -10.0
Viscosity	34 to 38 sec/qt
Fluid loss	10 ml or less
ph	8.5 - 9.0
LCM	as needed

B. Adequate stocks of drilling fluid materials will be on hand to handle lost circulation and/or kicks should they occur.

6. Testing, Logging, Coring, and Completion Programs

A. Testing:

The Atoka and the Morrow are both objectives in this well and will probably be drillstem tested if present. Other zones may be tested if hydrocarbon shows are encountered.

B. Logging:

A Gamma Ray/Neutron /Density log will be run from the surface to TD. A Dual Laterolog and a Microlog will be run over zones of interest.
A Mud Logger will be installed and in operation from 10,500 ft to TD.

C. Coring:

No conventional coring is anticipated. Sidewall cores may be taken over zones of interest.

D. Samples:

Formation samples will be caught and bagged at 10 ft intervals beginning at 5,200 ft.

E. Completion:

Zones expected to be productive will be selectively perforated and tested. Acid treatment for mud cleanup may be necessary and hydraulic fracturing may be employed to increase productivity.

7. Anticipated Abnormal pressures, Temperatures, or Other Hazards

A. Abnormal Pressures:

There have been a few isolated instances of minor over pressuring reported in the area but none is expected here. With the flow detection equipment, casing design, drilling fluid program, surface pressure control equipment, and with


15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 — 1 2 3 4 5 6 7 8

alerted crews, any unusual flows caused by over pressuring will be quickly detected and readily contained.

B. Abnormal Temperatures:

There are no known instances of abnormally high subsurface temperatures being recorded in the area and none are expected in this well.

C. Other Hazards:

Hydrogen Sulfide has been considered and none is anticipated in any of the formations to be penetrated in this well. However, monitoring equipment will be installed and crew training completed prior to drilling out of the 8 5/8" casing to be set at about 5,200 ft. In the event that Hydrogen sulfide is encountered, a Hydrogen Sulfide Drilling Operations Plan is included as Exhibit "J".

8. Anticipated Starting Date and Duration of Operations

Dirt work operations will commence as soon as drilling contractor selection is completed and the required permits have been received which is expected to be late September 1999. Location and road construction will require about 7 working days. Drilling operations will require about 40 to 50 days and completion operations and surface facilities construction are estimated to require an additional 30 days.