ENDURANCE
RESOURCES, LLC

Endurance Resources LLC

DRILLING & OPERATIONS PROGRAM

Stratocaster 20 Fed 6H
SHL: 380' FSL & 1805' FEL (N)
BHL: 330' FNL & 1760' FEL (C)
Sec 20-23S-34E
Lea Co, NM

1. Geological Name of Surface Formation
   Quaternary

2. Estimated Tops of Important Geological Markers

Fresh Water	300'	
Rustler	980'	
Top of Salt	1,472'	
Lamar Limestone	5,015'	
Delaware	5,058'	Oil
Bone Spring	8,593'	
1st Bone Spring	9,679'	Oil
2nd Bone Spring	10,224'	Oil

   TVD: 10,338' ; MD: 14,703'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas
   The estimated depths at which water, oil and gas will be encountered are as follows:
   Water: Average depth to water: 300'. Minimum depth: 255'. Max: 430'. As reported from the New Mexico Office of the State Engineer website.

   Oil & Gas: 5,150' – 10,900' (Delaware through Bone Spring)
   No other formations are expected to give up oil, gas, or fresh water in measurable quantities.

ENDURANCE
RESOURCES, LLC

4. Proposed Casing Program:

Hole Size	Interval	CSG OD	CSG Interval	Weight	Collar	Grade
17.5"	0' – 1080'	13.375"	0 - 1080'	54.5#	BTC	J-55
12.25"	1080' – 5030'	9.625"	0 - 5030'	40#	LTC	HCL-80
8.75"	5030' - TD	5.5"	0 – 14,703'	20#	BTC	HCP-110

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13.375"	2.24	5.43	15.44
9.625"	1.59	2.37	3.61
5.5"	2.44	2.53	2.27

NOTE: ALL CASING IS NEW & API APPROVED. WHILE RUNNING CASING, PIPE WILL BE KEPT A MINIMUM OF 1/3 FULL AT ALL TIMES TO AVOID APPROACHING COLLAPSE PRESSURE OF THE CASING. SURFACE CASING WILL BE WATCHED & NECESSARY ADJUSTMENTS MADE TO ENSURE PIPE IF FULL DUE TO LOST CIRCULATION ZONES THAT MAY OCCUR. CENTRALIZERS WILL BE USED ON SURFACE CASING

5. Proposed Cement Program:
   a. 13-3/8" Surface – TOC at Suface
      Lead: 400 sks ExtendaCem Class C (13.7 ppg / 1.694 cuft/sk)
      Tail: 570 sks HalCem Class C (14.8 ppg / 1.326 cuft/sk)
      **Calculated w/ 100% excess on OH volume
   b. 9-5/8" Intermediate – TOC at Surface
      Lead: 1200 sks EconoCem Class C + 0.4% HR-800 Retarder + 0.125 lbm/sk Poly-E-Flake Lost Circulation Additive (12.9 ppg / 1.789 cuft/sk)
      Tail: 300sks HalCem C (14.8 ppg / 1.326 cuft/sk)
      **Calculated w/ 50% excess on OH volumes & 10% in CH
   c. 5-1/2" Production – TOC at Surface
      Lead: 800 sks 50/50 Poz Class H + 5% Cal-Seal 60 Lost Circulation Additive + 8% Bentonite + 0.1% FE-2 + 0.25 lbm/sk D-Air 5000 Defoamer (11.5 ppg / 2.672 cuft/sk)
      Tail: 1100 sks Class H + 0.5% Halad R-344 Low Fluid Loss Control + 0.4% Halad R-322 + 0.4% HR-800 Retarder (14.5 ppg / 1.227 cuft/sk)
      **Calculated w/ 15% excess in vertical OH, 15% excess on OH volumes & 10% in CH

NOTE: THE ABOVE CEMENT VOLUMES COULD BE REVISED PENDING FLUID CALIPER & CALIPER LOG DATA. ALL VOLUMES ARE DESIGNED TO CIRCULATE TO SURFACE.

ENDURANCE
RESOURCES, LLC

6. Minimum Specifications for Pressure Control:

13-5/8 (5M) working pressure BOP system consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer (please see BOP schematic). A 5M choke manifold & 120 gallon accumulator with floor and remote operating stations & auxiliary power system. Rotating head as needed. A KC will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be NU and operated at least once a day while drilling and the blind rams will be operated when out of the hole during trips. From the base of the 13-3/8" csg through running of production casing, the well will be equipped with a 5M BOP system. Below the 9-5/8 csg shoe, this 5M system will be equipped with a HCR valve, remote kill line, & annular to match. The remote kill line will be installed prior to testing the system & tested to stack pressure.

Before drilling out of the 13-3/8 surface casing, BOP will be tested by an independent surface company to 250 psi low & 5000 psi high. Hydril will be tested to 250 psi low and 1500 psi high. Before drilling out the 9-5/8 intermediate shoe BOP will be tested by an independent service company to 250psi low and 5000 psi high. Hydril will be tested to 250 psi low and 2500 psi high. These low pressure tests from 250 to 300 psi will be held a minimum of 10 minutes if test is done with a test plug & 30 minutes without a test plug.

7. Estimated BHP:

4652 psi @ 10,338' TVD

8. Mud Program: The applicable depths & properties of this system are as follows:

Depth	Type of System	Mud Weight	Viscosity (sec)	Waterloss (cc)
0 – 1080'	Fresh	8.4 – 9.4	32-34	NC
1080' – 5030'	Brine	10.0	28-39	NC

ENDURANCE
RESOURCES, LLC

5030' - TD	Cut Brine	8.3 – 9.3	28-32	NC-12

NOTE: NECESSARY MUD PRODUCTS FOR WEIGHT ADDITION & FLUID LOSS WILL BE ON LOCATION AT ALL TIMES. VISUAL MUD MONITORING EQUIPMENT (I.E. TRIP TANK) WILL BE IN PLACE TO DETECT VOLUME CHANGES INDICATING LOSS OR GAIN OF CIRCULATION VOLUME WITH ALARMS.

9. Auxiliary Well Control & Monitoring Equipment:
   a. A KC will be in the drill string at all times.
   b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times
   c. H_2S detection equipment will be in operation & breathing apparatuses will be on location after the drill out of the 13-3/8" casing shoe until the 5-1/2" casing in cemented.

10. Testing, Logging & Coring Program:
   a. No drill stem tests are planned.
   b. Neutron Porosity well log ran from KOP to 200'.
   c. No coring is planned.
   d. No wireline logs are planned.

11. Potential Hazards:

No abnormal pressures or temperatures are expected. If H_2S is encountered, Endurance Resources LLC will comply with Onshore Order #6. Regardless, all personnel will be trained & qualified with H_2S safety. Rig safety equipment will all also be checked daily once drill out of the 13-3/8" casing shoe to TD. It has been noted that H_2S has been encountered in the salt section. If H_2S is encountered, measurements & formations will be reported to the BLM.

12. Anticipated starting date & Duration of Operations:

Road & location construction will begin after the BLM has approved the APD. Anticipated spud date will begin after BLM approval & after a drilling rig is secured. Move in operations & drilling is expected to take no more than 45 days. An additional 30-50 days will be needed to complete this well & construct surface facilities and/or lay flow lines in order to place well on production.