9/26/2001

## KUKUI OPERATING COMPANY

## SARGENT CANYON 31 FEDERAL #1 (NM - 105538) SEC. 31 - T 19S - R21E, EDDY COUNTY, NM

## COMPLETION PROCEDURES - ATOKA SANDS

 MIRU Key Energy rig (Artesia). Spot pipe racks. Deliver 7,200' of 2 7/8", 6.5 lbs./ft, J-55, EUE tbg. (new) from Tarpon Pipe in Midland. Call Randy Crook @ 915 - 683 - 8777 for tubing.

Call ABB Vetco Gray (Marvin in Odessa 915-580-6602) for tubing head installation. Have tbg. head & 2 9/16" x 5M tree delivered at same time. ABB will make final csg. cut and head installation.

- 2.) Nipple up 7 1/16" 5M BOPs. PU 4 3/4" tooth bit, scraper for 5 1/2", 17.0 lbs/ft csg., & 2 7/8" tbg. GIH to ~7,300' PBTD. Tally tbg. string. MIRU pump/vacuum transport & circulate hole with clean 2% KCL water. Circulate out a minimum of 160 bbls. POH & stand tbg. string. Release rental bit & scraper.
- 3.) Schedule COMPUTALOG Hobbs District for wireline work (505-392-7770). MIRU COMPUTALOG wireline truck. Run CBL/CCL/GR log from PBTD (~7,300') to 200' above TOC (est. TOC @ 5,800'). POOH with tools.

Evaluate CBL to ensure TOC is 500 ft. above top perfs. ie. 6,463'

GIH w/ 4" expendable carrier guns ( .43" dia. Holes ) and perforate Atoka.

 7,137' - 7,140'
 4 spf
 Dens./Neutron log depths

 7,091' - 7,094'
 4 spf

 6,993' - 6,998'
 4 spf

 6,963' - 6,968'
 4 spf

RDMO wireline equipment.

4.) GIH with 5 1/2", 17.0 lbs./ft. Baker Retrievamatic Pkr. & 2 7/8" tbg.

Set packer @ ~ 6,930' w/ 20,000 lbs. compression or as instructed by tool operator. Test pkr. to 2,000 psi. ND BOPE. NU 2 9/16" x 5M tree. RU flowline to pit.

5.) MIRU Schlumberger acid equipment. Swab / flow tbg. dry. Perform breakdown acid job as per recommendation. Max. WHP of 5,000 psi. Place 1,000 psi on annulus prior to treatment and monitor during job.

6.) Flow back treatment to pit. Evaluate results and prepare for frac if required.

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7.) Load tbg. with treated KCL water to kill well. ND tree. NU BOPs. POH & LD pkr. Release Baker tools.

GIH with 2 7/8" open ended tbg. and set EOT @ ~ 6,900'. Run 2 7/8", 8rd. heavy blast joint (10') on top for annulus frac job. ND BOPs & NU 2 9/16" 5M tree. RU flowlines to pit.

RDMO workover rig. Spot and load frac tanks.

8.) MIRU Schlumberger frac equipment. Test all surface equipment to 5,000 psi. Conduct safety meeting.

Frac Atoka sands with YF-130 fluid and16/30 sand pumped down5 1/2" x 2 7/8" annulus @ 25 bpm.Monitor static tbg. pressure.Do not exceed 4,500 psi max. WHP.

Record ISIP, 5, 10, & 15 min. SIPs.

**9.)** Initiate flowback as instructed based on fluid break test. Flow well to reserve pit until all load is recovered. Install test separator and conduct 4 point test as required by OCD.