CUCHITI "5" FEDERAL #1 OPERATION: RECOMPLETE IN LOVING SAND IN LOWER BRUSHY CANYON FORMATION (6513 - 6572')

07/26/99 HAD MATTING BOARDS SET. MI RU PULLING UNIT. UNSEAT PUMPS. POH & LD 100 7/8" NORRIS TYPE 97 RODS.

02/27/99 POH & LD AND WAREHOUSED RODS. WELL FLOWING OUT CSG. RU PUMP TRUCK ON TBG. CIRC'D OUT 20 BO FROM BACKSIDE. WELL DEAD W/ONLY SLIGHT GAS BLOW. ND WELLHEAD. NU SPOOL & BOP. UNSEAT TAC. POH & LD 16 JUTS TBG. ON 17TH JT, COULD NOT GET TAC TO COME FURTHER UP. PULED 105,000#, COULD NOT PULL UP. TBG FREE GOING DOWN. PU & RIH W/18 JTS TBG W/TAC @ 9796'. TAC WOULD NOT RESET.

Q2/28/99 RU APOLLO WL. RIH W/JET CUTTER + COLLAR LOCATOR TO 9794' (TAC). POH UP TO 9784'. CUT TBG W/JET CUTTER. SET BACK DOWN ON TAC. CUT NOT COMPLETE. POH W/WL. JARRED & TURNED ON TBG. POH W/TBG PAST TIGHT SPOT @ 9213'. HAD 20 POINTS DRAG ON TBG THRU TIGHT SPOT THEN FREED UP. RIH W/TBG TO 9784'. RU HALLIBURTON. BROKE CIRC. SWI. PUMPED INTO FORMATION & PRESSURED UP TO 1000 PSI @ 2 BPM. FLOWED WELL BACK 10 MIN. UNTIL DEAD. SPOTTED 50 SXS CEMT @ 9784' UP TO9554'. POH W/TBG TO 9100' ABOVE TIGHT SPOT. CIRC'D TBG CLEAN. POH & LD 100 JTS TBG ON GROUND AND STAND BACK 210 JTS TBG IN DERRICK. JT THAT WAS CUT STILL TOGETHER + TAC +2-3/8" SN + 2-3/8" x 4' PERF SUB + 1 JT 2-3/8" TBG OPEN ENDED FOR MUD ANCHOR. NOTHING LEFT IN HOLE. RIH W/WL W/SINKER BARS + COLLAR LOCATOR. TAGGED CEMT @ 9630' POH. RIH W/CIBP TO 9215'. WLTD & SET DOWN IN TIGHT SPOT. PU TO 9180' SET CIBP. POH RIH & CAPPED W/35' CEMT. NEW PBTD @ 9145' WLTD. POH. RD APOLLO WL. TALLIED IN HOLE W/208 JTS 2-7/8" CS HYDRIL 6.5# TBG TO 6571'. RU PUMP TRUCK. CIRC'D HOLE CLEAN W/2% KCL WTR. (RECEIVED CHANGE OF PLANS VERBAL APPROVAL FROM DAVID GLASS, BLM ROSWELL).

07/29/99 RU PETROPLEX ACIDIZING. TESTED CIBP & CSG TO 1500 PSI & HELD FOR 5 MIN, OK. SPOTTED 350 GALS 7-1/2% MUD CLEAN OUT ACID TRIPLE INHIBITED FROM 6571'. POH W/TBG. RU APOLLO WL. RIH W/4" SELECT FIRE GUNS LOADED W/PREMIUM CHARGES & SHOT 1 JSPF @ 6514', 6516', 6518', 6521', 6523', 6525', 6527', 6529', 6531', 6535', 6537', 6539', 6541', 6545', 6548', 6551', 6558', 6567', 6571', (19 HOLES). DEPTH PICKS ON SWSCO OPEN HOLE GR/CNL/LDT LOG RUN 01/09/95 (TO CORRELATE TO CASED HOLE GR/CCL/CBL RUN 04/18/99, MUST SUBTRACT 12' FROM OPEN HOLE LOG = TOP PERF @ 6502', BTM @ 6559'). RU APOLLO WL. RU HYDROSTATIC TBG TESTERS. TESTED TBG FLANGE TO 10,000 PSI, WOULD NOT HOLD. CLEANED RING GASKET & RE-TIGHTENED. WOULD NOT HOLD OVER 5000 PSI. WILL USE TREE SAVER ON FRAC JOB. RIH W/2-7/8" x 7" AST PKR + 2-7/8"8RD PIN TO 2-7/8" CS HYDRIL BOX + CHANGEOVER + 203 JTS 2-7/8" 6.5# CS HYDRIL TBG TO 6396'. TEST TBG ABOVE SLIPS TO 2000 PSI & HOLDING, THEN GOING TO 10,000 PSI. DID NOT HAVE ANY LEAKS. RD HYDROSTATIC TBG TESTERS. REVERSE SPOT ACID INTO TBG. SET PKR @ 6396'. PRESSURED UP TO 1000 PSI & HELD. GOT ON TBG. PRESSURED TO 1500 PSI, FORMATION BROKE BACK TO 1160 PSI. PUMPED AWAY REST OF SPOT ACID @ AVG 4 BPM @ 1400 PSI. ISIP 800 PSI, 5 MIN 675 PSI, 10 MIN 640 PSI, 15 MIN 630 PSI. BLED PRESSURE OFF TBG & CSG. CONTINUE TREATMENT OF PERFS W/1500 GALS 7-1/2% MUD CLEAN OUT ACID. SPOTTED ACID & BALLS TO 5 BBLS FROM BTM OF TBG. CLOSED BYPASS & TRAPPED 750 PSI ON CSG & HELD. PUMPED ACID @ 5 BPM @ 1650 PSI. STARTED GETTING GOOD BALL ACTION W/PRESSURE GOING UP AS MORE BALLS HIT. BALLED OUT W/1200 GALS ACID ON FORMATION. PRESSURE @ 4000 PSI. SD. HAD INCREASE ON BACKSIDE OF 750 PSI TO 1400 PSI ON BALL OUT. BLED CSG OFF TO 375 PSI. BLED TBG DOWN TO 600 PSI. PUMPED AWAY REST OF ACID @ 5 BPM @ 2090 PSI. CSG CAME UP TO 450 PSI & STAYED. LEAK APPEARS TO BE ON PRESSURES ABOVE 3500 PSI. ISIP 800 PSI, 5 MIN 760 PSI, 10 MIN 730 PSI, 15 MIN 725 PSI. MAX PRESS ON JOB 4000 PSI ON BALL OUT. AVG RATE 5 BPM. SWI. RD PETROPLEX ACIDIZING. SDON. 94 BLTR.

07/30/99 12 SITP AFTER ACID JOB 160 PSI. CP 450 PSI. BLED TBG & CSG PRESSURE OFF. UNSET PKR. RIH W/6JTS TBG TO INSURE BALLS OFF PERFS. POH & LD 6 JTS TBG. PKR SET @ 6396'. PRESSURED BACKSIDE TO 1000 PSI & HELD. BLED DOWN TO 500 PSI & LEFT ON BACKSIDE. RU TO SWAB. IFL @ SURFACE.

07/31/99 16 HR SITP 200 PSI. BLED DOWN. NO FLUID TO SURFACE. IFL © 2700' FS, 21 BBLS ENTRY. HAD % BBL FREE OIL ON FIRST RUN. SWABBED OFF TO SN IN 2 HRS. RECOVERED 18 BW W/SLIGHT TRACE OIL. HAD GAS BLOW AFTER EACH RUN. SD 1 HR FOR FLUID ENTRY CHECK, 400' OR 2 BBLS ENTRY. SD SWABBING. RECOVERY 1 BO + 20 BW. SWI.

08/02/99 44 HR SITP 410 PSI. IFL @ 2200' FS, 24 BBLS ENTRY. SWABBED. GOOD GAS BLOW AFTER EACH RUN, UNSET PKR.

08/03/99 RU HYDROSTATIC TBG TESTERS. TESTED IN HOLE W/2-7/8" x 7" ATS PKR + 2-7/8" SN + -7 /8" 8RD PIN + 2-7/8" CS HYDRIL BOX + CHANGEOVER + 203 JTS 2-7/8" 6.5# CS HYDRIL TBG + CS HYDRIL PIN TO PIN NIPPLE + TBG ADAPTER TO 2000 PSI, HELD THEN TESTED TO 10,000 PSI & HELD. RELEASED PRESSURE, SWI. FRAC TANKS FILLED W/FRESH WATER FOR FRAC JOB.

08/04/99 RU DOWELL TO FRAC PERFS 6514 -6571' W/34,000 GALS 35# X-LINKED GEL CARRYING 103,500# 16/30 MESH OTTAWA SAND + 19,000# 16/30 RESIN COATED SAND DOWN TBG @ +/- 18 BPM. FRAC WENT AS PLANNED ON ALL STEPS. HAD MAX PRESSURE ON PAD OF 4115 PSI. AVG RATE 18.1 BPM. ISIP 943 PSI, 5 MIN 874 PSI, 10 MIN 856 PSI, 15 MIN 847 PSI, SWI, RD DOWELL.

08/05/99 22 HR SITP AFTER FRAC 500 PSI. LINES BUILT TO FRAC TANK. OPENED WELL, FLOWED WELL 7 HRS, RECOVERED 80 BW. GEL BROKE GOOD W/NO SAND IN FLUID. LEFT WELL TO FLOW OVERNIGHT TO FRAC TANKS. FTP 140 PSI. CHOKE ON 15/64".

08/06-10/99 SWABBING WELL, WATER SAMPLE TO MARTIN WATER LAB.

08/11/99 NU BOP, UNSEAT PKR. LET HOLE EQUALIZE. PU 7 JTS TBG. RIH W/TBG & PKR TO 6611'. PERFS CLEAR. WELL FLOWING OFF FREE OIL ON TBG. CIRC'D OIL OFF TBG. RU ON TBG. CIRC'D OIL OFF CSG. PO & LD 6 JTS, STANDING BACK 204 JTS. TBG. LD PKR. RIH W/1 JT 2-3/8" 8RD TBG FOR MUD ANCHOR OPEN ENDED + 2-3/8" x 4' PERF SUB + 2-3/8" x 7" TAC + 2-3/8" SN + 2-3/8" 8RD PIN + 2-7/8" CS HYDRIL BOX + 170 JTS 2-7/8" CS HYDRIL TBG.

08/12/99 FINISH RIH W/34 JTS 2-7/8" CS HYDRIL 6.53 TBG + 2-7/8" PIN TO PIN cs HYDRIL NIPPLE + TBG HANGER ADAPTER. ND BOP SET TAC. SN @ 6440', TAC @ 6441', BTM OF MUD ANCHOR 6479', PERFS @ 6514-6571'. RIH W/2"X1-3/4"X24' PUMP + ALL NORRIS TYPE 97 RODS. SPACED WELL 30" OFF BTM, HUNG WELL ON. SET GENERATOR AND TIED INTO PUMPING UNIT. PUMPING TO FRAC TANKS.