VACUUM GB/SA UNIT EAST TRACT 3229-002

ROTATE FROM 4102' - 4212' W/ 11K WOB, 30 RPM ROTARY.

SURVEY @ 4062', 9.1 DEG, 85.3 DEG AZIMUTH.

SLIDE FROM 4112' - 4133' @ 180 DEG GTF W/ 11K WOB.

ROTATE FROM 4133'-4143' W/ 11K WOB, 30 RPM ROTARY.

SURVEY @ 4903'.

LITHOLOGY: 70% DOLO, 20% ANH, 10% LIME, 30 BGG, 50 CG, NO SHOWS.

4/12/02 – ACCUM TIME TO SLIDE & ROTATE FROM 4143' – 4234' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM MWD TIME TO ACQUIRE SURVEYS FROM 4143' - 4234'.

SWEEP & CIRC HOLE FOR TRIP. POOH FOR BHA CHANGE. CHANGE OUT MWD & FLOW TUBE. TEST TOOLS. NO TEST. CHANGE OUT MWD & FLOW TUBE. TEST TOOLS (OK). GIH W/ BHA #2, REQUIRED FOR 2ND CURVE SECTION. CIRC. WORK W/ MWD. NO PULSES. POOH TO CHANGE OUT MWD TOOL. CHANGE OUT MWD TOOL. TEST TOOLS (OK). TRIP IN HOLE. ACCUM TIME TO SLIDE FROM 4234' – 4364' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN. ACCUM MWD TIME TO ACQUIRE SURVEY FROM 4234' – 4364'.

80% DOLOMITE 20% ANHY

BG = 12U CONN = 102U MAX = 164

SHOWS: 4244' - 4280', 4300' - 4330'.

4/13/02 - CIRCULATE. PROJECT SURVEY. WAIT ON ORDERS.

SLIDE FROM 4364' - 4375' @ 10 DEG L. WOB 10K.

CIRCULATE. PROJECT SURVEYS. WAIT ON ORDERS. POOH FOR BHA. WAIT ON ORDERS.

ADJUST MOTOR TO .35 DEG. TEST TOOLS (OK). GIH W/ BHA #3.

ACCUM TIME TO SLIDE & ROTATE FROM 4375' – 4427' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM MWD TIME TO ACQUIRE SURVEYS FROM 4375' - 4427'.

SWEEP & CIRC HOLE FOR TOH. POOH FOR BHA. SAFETY MTG. ADJUST MOTOR BEND. TEST TOOLS (OK). GIH.

ACCUM TIME TO SLIDE & ROTATE 4427' – 4570' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM TIME TO ACQUIRE MWD SURVEYS FROM 4427' - 4570'.

100% DOLOMITE

BG = 40U CG = 60U TR = 150U

4/14/02 – SLIDE FROM 4472' – 4585' @ HS. WOB – 12K.

SURVEY @ 4535' = 65.4 DEG, 87.3 AZ.

SLIDE FROM 4585' – 4595' @ 20R. WOB – 12K.

SWEEP & CIRC HOLE FOR TRIP. POOH FOR BHA CHANGE. PU MOTOR & DC. SET MOTOR @ 1.69 DEG. TEST TOOLS. MU PDC BIT. GIH W/ LATERAL ASSY. PU POWER SWIVEL & WASH 4506' – 4595'.

ACCUM TIME TO SLIDE & ROTATE FROM 4595' – 4882' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM MWD TIME TO ACQUIRE SURVEYS FROM 4595' -- 4882'.

10% ANHY, 30% SILTSONE, 60% DOLOMTE

BG = 15U CG = 174U TRG = 141U MAX = 231U

4/15/02 – ACCUM TIME TO SLIDE & ROTATE FROM 4882' – 4945' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM MWD TIME TO ACQUIRE SURVEYS FROM 4882' - 4945'.

PUMP REPAIRS.

ACCUM TIME TO SLIDE & ROTATE FROM 4945' – 5102' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.

ACCUM MWD TIME TO ACQUIRE SURVEYS FROM 4945' – 5102'.

CIRCULATE SWEEPS. WORK TIGHT HOLE @ 5102' - 5071'.

LD SWIVEL. POOH W/ 20 STANDS FOR WIPER TRIP. RIH PU SWIVEL.

ACCUM TIME TO SLIDE & ROTATE FROM 5102' – 5326' AS REQUIRED TO FOLLOW DIRECTIONAL PLAN.