

# UNION OIL CO. OF CALIFORNIA DRILLING RECORD

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LEASE: BUFFALO UNIVERSITY WELL NO.: 3 FIELD: UNIVERSITY BLOCK 9 (PENN)

DATE DETAILS OF OPERATIONS, DESCRIPTIONS, & RESULTS

LOCATION: 1980' FNL & 1980' FWL, SECTION 3, BLOCK 1, UNIVERSITY LAND SURVEY, ANDREWS COUNTY, TEXAS.

4-29-90: 279' WOC. 379' 5-1/2. RED BED. 1/2" @ 379'. MUD: 8.6, 34, - - 9.5. MIRU HONDO RIG #7. SPUD 17-1/2" SURF HOLE @ 7:00 A.M. 4/28/90. TO SURF HOLE TO 379' @ 12:30 P.M. 4/28/90. CIRC 1/4 HR., POOH. R&C 8 JTS & 1 PC (364') OF 13-3/8" 48# H-40 PUSAN BRD ST&C NEW ERW CSG @ 379'. CMTD W/475 SXS CLASS "C" CMT W/3% GEL 2% CACL, 1/4# FLOCELE @ 14.8 PPG. DISPL CMT TO 340' W/51 BFW @ 5 BPM @ 250-300 PSI. CIP & JC @ 4:00 P.M. 4/28/90. CIRC 75 SXS CMT. WOC 4 HRS. CUT OFF 13-3/8" CSG, WELD ON CSG HD, NU BOP'S, TSTD BLIND RAMS, CHK MAN & 13-3/8" CSG TO 1000 PSI, OK. TIH TO TOC @ 335', TSTD 4-1/2" PIPE RAMS TO 1000 PSI, OK. WOC INC.

4-30 2030' DRLG. 1651' 19-1/4. RED BED & SD. 3/4" @ 879', 3/4" @ 1378', 3/4" @ 1812'. MUD: 10, 28, --, 10. FIN WOC. DRLD CMT PLUG & SHOE F/335' TO-379'. OF & DA @ 10:00 A.M. 4/29/90. 18 HR TOTAL WOC. LOST COMPLETE RETURNS @ 1821'. MIXED & PUMPED LCM PILL & REGAINED RETURNS.

5-1 3192' DRLG. 1162' 20. ANHY, SALT & LM. 1/2" @ 2301', 3/4" @ 2809'. MUD: 10.0, 28 - - 10. TRIP FOR BIT #3 @ 2809'. WASH 90' TO BTM, 20' FILL.

5-2 4024' DRLG. 832' 23-1/4. SALT & ANHY. 3/4" @ 3269', 1/2" @ 3734'. MUD: 10, 28 - - 9.5, 185,000.

5-3 4550' DRLG. 526' 23-1/4. ANHY & LM. MUD: 10, 27 - - 9.5, 180,000.

5-4 4928' DRLG. 378' 23-1/2. ANHY & LM. 3/4" @ 4235', 1/2" @ 4731'. MUD: 10.1, 27 - - 9.5, 188,000.

5-5 5505' DRLG. 577' 23-1/4. ANHY & LM. 1" @ 5204'. MUD: 10.1, 27 - - 9.5, 186,000.

5-6 5955' DRLG. 450' 23-1/2. LM. 1" @ 5690'. MUD: 10.1, 28 - - 9.5, 186,000.

5-7 6009' CIRC. 45' 2-1/4. LM. MUD: 10.1, 30. DRLD 11" HOLE TO 6009' TD @ 8:30 AM 5-6-90. CIRC 2 HRS. TOH TO 4100'. R&C 140 JTS + 1 PC (5986') 8-5/8" 32# HC80 & K-55 BRD ST&C NEW ERW CSG @ 6000' W/1075 SXS "C" 50:50:2 POZ + 26# SALT @ 14.1 PPG. DISP & BUMP PLUG TO FC @ 5953' @ 10-3 BPM & 0-800#. PD & CIP @ 2:25 AM 5-7-90. FLOAT HELD. OPEN DV TOOL W/OPENING BOMB & 1200#. CIRC 240 SXS CMT TO PIT. CIRC BETWEEN STGS, INCOMP.

5-8 6105' DRLG. 105' 3-1/2. LM. MUD: 8.4, 28 - - 8.5. COMPLETE CIRC BETWEEN STGS (6 HRS). CMT 2ND STG, THROUGH DV TOOL @ 4108 W/1750 SXS "C" + 3% GEL, 2% CACL2, 1/4# CELLOFLAKE @ 13.7 PPG F/B 100 SXS "C" NEAT @ 14.8 PPG DISP CLOSING PLUG W/250 BFW @ 18-3 BPM & 0-1200#. BUMP PLUG & CLOSED DV TOOL W/1900#. DV HELD. JC & CIP @ 10:15 AM 5-7-90. CIRC 365 SXS TO PIT. PU BOP'S. SET SLIPS. CUT OFF CSG. NU CSG SPOOL. NU BOP'S. TSTD 8-5/8" CSG, CSG SPOOL, BLINDS & CK MANIFOLD TO 1100#, OK. RAM 7-7/8" BIT #4. DRLD DV TOOL/1 HR, TSTD DV & PIPE RAMS TO 1000#, OK. FTI. DRLD CMT, PLUG, FC & SHOE/1-1/4 HR. OF & DA @ 2:30 AM 5-8-90. HR TOTAL WOC.

5-9 6615' DRLG. 510' 23-3/4. LM. 1" @ 6479'. MUD: 8.4, 28 - - 10.

5-10 7021' DRLG. 406' 23-1/4. LM. 1-1/2" @ 6946'. MUD: 8.4, 27 - - 10.5, 5600.

5-11 7570' DRLG. 549' 23. LM. 1-1/2" @ 7449'. MUD: 8.4, 27 - - 10.5, 5600.

5-12 7960' DRLG. 380' 23-1/4. LM. 2" @ 7919'. MUD: 8.4, 27 - - 10, 5500.

5-13 8200' DRLG. 240' 17-1/2. LM. 2-1/4" @ 8000'. MUD: 8.4, 35, 16, 2/32, 10, 5600.

5-14 8390' DRLG. 190' 15. LM. MUD: 8.5, 35, 16, 2, 9.5, 5600.

5-15 8690' DRLG. 300' 23-3/4. LM & DOLO. MUD: 8.5, 35, 8, 2/32, 10, 5000.

5-16 8985' DRLG. 295' 22. 70% LM & 30% SH. 1-1/2" @ 8957'. MUD: 8.5, 34, 9.4, 2/32, 10.5, 5200.

5-17 9325' DRLG. 340' 23-1/4. 90% LM & 10% SH. 1-1/2" @ 9112'. MUD: 8.6+, 35, 9, 2/32, 9.5, 4900.

5-18 9695' DRLG. 370' 23-1/4. 90% LM, 10% SH. 1-1/2" @ 9574'. MUD: 8.7+, 35, 8.0, 2/32, 9, 5100.

5-19 10,055' DRLG. 360' 23-3/4. LM & SH. MUD: 8.8, 39, 7.6, 2/32, 9.5, 5100.

5-20 10,170' LOGGING. 115' 8-3/4. LM & SH. 1-1/2" @ 10,055', 2" @ 10,170'. MUD: 8.8, 39, 8, 1, 9.5, 5100. DRLD 7-7/8" HOLE TO 10,170' TD @ 3:30 PM 5-19-90. CIRC 3 HRS. TOH. RU SCHLUMBERGER. RAM GR-DIL-MSFL 10,170' LTD-6000'. NOW RUN GR-CNL-LDT, INCOMP.



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5-21	10,170' TD, NU TBG SPOOL. MUD: 8.8, 39, 8, 1/32, 9.5, 5100. FINISH RUNNING CNL-LDT-GR FRM 10,170' TO SURF (LDT TO 6000'). RAN BIT TO TD & CIRC 3 HRS. POH, LDDP & DC'S. R&C 242 JTS + 1 PC (10,158') 5-1/2" 17# N-80 & K-55 BRD LT&C NEW SMLS CSG @ 10,170' W/450 SXS "H" LITE + 12 # SALT, 0.4% CFR-2, 1/4# FLOCELE @ 12.4 PPG F/B 730 SXS "H" 50:50 :2 PO2 + 5# SALT, 1/4# FLOCELE @ 14.4 PPG. DISP PLUG TO FC @ 10,127' @ 10-3 BPM & 0-1400#. DID NOT BUMP PLUG. FLOAT HELD. CIP & JC @ 3:50 AM 5-21-90. PU BOP. SET SLIPS. CUT OFF 5-1/2" CSG. NU TBG SPOOL, INCOMP.
5-22	10,170' TD, MORT. FINISH NU TBG SPOOL. RIG REL @ 10:00 AM 5-21-90. TOC @ 3500' BY TEMP SURVEY. <u>TEMP OFF REPORT.</u>
5-25	MIRU SUNDOWN WELL SERV ODP. NU BOP. RAN 4-3/4" BIT, PU 2-7/8 6.5# J-55 EUE BRD NEW & USED SMLS TBG TO 4500', INC. SDON.
5-26	FINISH PU 2-7/8" TBG TO 9760'. DRLD CMT, PLUG, FC & CMT TO 10,120' ETD F/6 HRS. CIRC HOLE CLEAN. DISP HOLE W/220 BBL FILTERED PROD WTR. SDON.
5-27	TOH W/BIT. SCHLUMBERGER RAN CBL-CET-GR-CCL FRM 10,118' WL-ETD TO 8500'. RAN OE'D 2-7/8" TBG TO 10,100'. PICKLED TBG W/750 GAL 15% HCL. SDON.
5-28	SDOS.
5-29	SDOS.
5-30	SPTD 500 GAL 15% NE, FE & LST HCL FRM 10,075' TO 9560'. TOH. PERF 5-1/2" CSG IN STRAWN INT W/4" CSG GUN W/2 SPF @ 9950-10,075' (42 TOTAL HOLES). F-LVL 1000' & STDY. RAN 5-1/2" STRADDLE TOOLS ON 2-7/8" TBG. SET RBP @ 10,105'. PUH, PSA 9860'. F-LVL 1300'. PERF BRK. TLTR 74 BLW. SWBD 81 BW/3-1/2 HRS. F-LVL 1300-5400'. SWBD 20 BTF LAST HR, TR OIL. TR 81 OF 74 BLW. SDON.
5-31	SITP 235/14. F-LVL 2300'. SWBD 7.5 BO + 210 BW/11 HRS. F-LVL 2300-7000' (& STILL SLOWLY DROPPING). SWBD 20 BTF LAST HR, 2% OIL. TR 291 OF 74 BLW. SDON.
6-1	SITP 200/13. F-LVL 2500'. SWBD 4 BO + 20 BW/1 HR. F-LVL 2500-5000'. LAST SWB RUN 2% OIL. REL PKR & RIH, PSA 10,044' TO ISOLATE STRAWN PERFS @ 10,070-075'. SWBD & SHOWED COMMUNICATION TO PERFS @ 9994'. PUH, PSA 9962' TO ISOLATE STRAWN PERFS @ 9974-10,075'. SWBD & SHOWED COMMUNICATION TO PERFS @ 9954'. PUH, PSA 9830'. SWBD ALL STRAWN PERFS 9950-10,075'. F-LVL 5000'. SWBD 2 BO + 45 BW/2 HRS. F-LVL 5000-6900'. SWBD 20 BTF, 2% OIL LAST HR. TR 356 OF 74 BLW. SDON.
6-2	13-1/2 HRS SITP 180 PSI. F-LVL @ 2900'. SWBD 5 BO + 198 BW FOR 9HRS. F-LVL 2900-7500'. SWBD 19 BBLs LAST HR, CUT 2% OIL. TR 554 OF 74 BLW. SDON.
6-3	14-1/2 HRS SITP 180 PSI. REL PKR, RET RBP, POOH. RIH W/5-1/2" PKR ON 2-7/8" TBG, SPA 9868'. ACIDIZE STRAWN PERFS 9950-10,074' W/4400 GAL 15% HCL W/NE, FE & LST ACID W/55 1.3 SP GR BS, 660 LBS BAF, 2000 LBS GRS IN 3 STGS @ 3-6.1 BPM @ 2580-2180-3200 PSI. GOOD BLOCK ACTION. ISIP 1250 (5) 680 (10) 520 (15) 370 PSI. TLTR 188 BBLs. SWBD 209 BW FOR 7 HRS. F-LVL SURF-5200'. SWBD 23 BBLs LAST HR W/TR OF OIL. TR 209 OF 188 BLW. SDON.
6-4	SDOS.
6-5	SITP 100/38. F-LVL 2900'. SWBD 2 BO + 218 BW/11 HRS. F-LVL 2900-5400' & STDY. SWBD 20 BTF LAST HR, 3% OIL. TR 427 OF 188 BLW.
6-6	REL & TOH W/PKR. RAN & SET CIBP ON 2-7/8" TBG @ 9900'. PRES TSTD CIBP, 5-1/2" CSG & SURF EQUIP TO 2000#, OK. PUH TO 9268' & SPTD 500 GAL 15% NE, FE & LST CHL FRM 9268' TO 8750'. PUH TO 6000'. SWBD F-LVL TO 3000', INCOMP. SDON.
6-7	FINISH SWABBING F-LVL TO 4000'. TOH. PERF 5-1/2" CSG IN PENN LM W/ 4" CSG GUN W/ 2 SPF @ 9233-38', 9240-47' & 9262-68' (39 TOTAL HOLES). RAN 5-1/2" STRADDLE ASSY 90W 2-7/8" TBG & SET RBP @ 9340'. PUH, PSA 8635'. RAN FLUID CONTROL VALVE ON SD LINE. BRK DWN PENN LM PERFS 9233-9268' @ 1/2-1 BPM & 2800#. TLTR 75 BLW. SWBD 77 BW/3-1/2 HR. F-LVL SURF-7400'. SWBD 17 BTF LAST HR, NSO, TR 77 OF 75 BLW.
6-8	12 HR SITP 40#. F-LVL 3000'. SWBD 107 BW/6-1/2 HR. F-LVL 3000-8400' SW. SD 1 HR. F-LVL 6000'. SWBD 15 BTF LAST HR, NSO. TR 184 OF 75 BLW. SDON.
6-9	F-LVL 4000' 13 HRS. NO OIL. REL PKR & RETRIEVE BP. RESET RBP @ 9200'. TEST RBP TO 2000 PSI OK. P.U. TO 9144. SPOTTED 500 GALS 15% NCL W/NE, FE, & LST FROM 9144-8630'. P.U. TO 7300'. F-LVL TO 4000'. POH W/PKR. SDON.



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DATE	DETAILS OF OPERATIONS, DESCRIPTIONS, & RESULTS
6-10	SCHLUM PERF'D PENN LIME USING 4: HJ III CSG GUN @ 2 SPF: 9119-9140' (TOTAL 16 HOLES). F-LVL STEADY @ 4300'. R&S 5-1/2" RTTS PKR ON 2-7/8" WS @ 8600'. RAN FL CNTL VALVE TO SN @ 8600', BRKDN PERFS 9119-44 @ 1/4 - 1-1/2 BPM/2000-1800#. TLTR: 75 BBLs. RU SWAB, REC 56 BBLs/5 HRS, F-LVL SURF-8600' (SN), LAST HR: 50 BLW-NSO. RET FL CNTL VALVE-NO ENTRY. TR 56 OF 75 BLW. SDON.
6-11	SDOS.
6-12	36 HR SITP 220#. F-LVL 4800'. SWBD 11 BO + 15 BW/6 HRS. F-LVL 4800'-8600' (SN). SWBD DRY. SWBD 1/2 BTF/HR LAST 2 HRS. REL PKR, TIH, PSA 9036'. SWBD TBG DRY. SDON.
6-13	ACIDIZED PENN LIME PERFS 9119-44 W/700 GAL 15% HCL W/NE, FE, & LST + 25 X 1.3 SG BS TO DIVERT. PMPD @ 3.7-2.9 BPM/1750-2100 PSI W/SLIGHT BALL ACTION. ISIP 1850, 5/1310, 10/970, 15/620. TLTR 74 BBL. SWBD 1 BO + 89 BW/6-1/2 HRS W/F-LVL SURF-9035 (SN) & DRY. LAST HR: REC 1 BTF @ 20% OIL. TR 89 OF 74 BLW. SDON.
6-14	REL PKR & RETR RBP, RESET @ 9050'. TSTD RBP & CSG TO 2000 PSI/OK. SPOT 500 GAL 15% HCL W/NE, FE & LST 8996'-8480'. PU TO 7200' & SWAB F-LVL TO 4000'. TOH, SDON.
6-15	RU SCHLUM & PERFERED PENN DETRITAL USING 4" CSG GUN @ 2 SPF: 8843-8996', TOTAL 37 HOLES. F-LVL 4500'. RIH W/HOWCO PPI PKR W/12' SPACING ON 2-7/8" TBG, SPA 8295' & RAN FL CNTL VALVE ON SAND LINE. BRKDN PERFS 8843-8996' @ 1/4 - 1.5 BPM/1700-1400 PSI. TLTR 75 BBLs. SWBD 62 BW/5 HRS W/F-LVL SURF-8275' (SN) & DRY. LAST HR: 1/2 BTF W/TRC OIL. TR 62 OF 75 BLW. SDON.
6-16	12 1/2 HR SITP, 130 PSI, FL 7900'. SWBD 1/2 BW IN 1 SWAB RUN & WELL WAS DRY. REL PKR, RIH TO 8996, FISHED. FLUID CONTROL VALVE, RAN & SET NEW FLUID CONTROL VALVE. ACIDIZED PENN DETRITAL 8843-8996 W/PPI TOOL W/12' SPACING W/1500 GAL 15% NE FE LST ACID @ .8-1.6 BPM @ 2840-2000 PSI AVERAGE. 7 LTR 88 BBLs SPA 8787. SWBD 47 BW FOR 2 HRS. FL 300-7000'. RELEASED PKR, FISHED FLUID CONTROL VALVE. SWBD 27 BW FOR 1-1/2 HRS, FL 4800-8787 (DRY). SWBD 6 BBLs LAST HR CUT 1% OIL. TR 74 OF 88 BLW. SDON.
6-17	12 HR SITP 65 PSI, FL @ 8000'. SWBD 4-1/2 BBLs CUT 5% OIL. ACIDIZE PENN DETRITAL PERFS 8843-8996 W/1700 GAL 15% HCL NLE FE LST ACID, 60 1.3 SP GR BALL SEALERS @ 4-6.1 BPM @ 1700-3340 PSI. NO BALL ACTION. ISIP 1670 (5) 1150 (10) 1040 (15) 950 PSI. TLTR 95 BBLs. SWBD 70 BW FOR 3-1/2 HRS. FL SUR 8700' (DRY). SWBD 16 BBLs LAST HR. CUT 2% OIL. TR 70 OF 95 BLW. SD 2 HR NO FLUID ENTRY. SDON.
6-18	SDOS.
6-19	40 HRS SITP 120 PSI. FL @ 7000', 1800 ENTRY FOR 40 HRS. SWBD 6 BO + 4-1/2 BW FOR 1 HR. FL 7000-8700' (DRY). SD 5 HRS, HAD 1/2 BBL ENTRY. TR 75 OF 95 BLW. SDON.
6-20	16 HR SITP 65#. ACIDIZE PENN DETRITAL PERFS 8843-8996' W/3000 GAL 15% NE, FE & LST HCL + 70 1.3 SG BS'S TO DIVERT @ 7.3-9.5 BPM & 4100-6000# BALL OUT (W/58 BS'S ON FORM). SURGE BS'S & RESUME PMPG @ 9.5 BPM & 5000-4800#. ISIP 1850 (5) 1470 (10) 1340 (15) 1270. TLTR 129 BBL. SWBD 101 BW/8 HRS. F-LVL SURF-8780 (SN). 300' ENTRY AFTER 2 HRS, 10% OIL. TR 101 OF 129 BLW. SDON.
6-21	13-HR SITP 70#. F-LVL 7600'. SWBD 3 BO + 3 BW/1 HR. SWBD DRY. REL & TOH W/TOOLS. PERF 5-1/2" CSG IN STRAWN INT W/4" CSG GUN W/2 SPF @ 9693-9718' (51 TOTAL HOLES). RAN 5-1/2" STRADOLE ASSY ON 2-7/8" TBG. SET RBP @ 9800'. PUH W/PKR TO 9718'. SDON.
6-22	RAN SPOT CONTROL VALVE ON SD LINE. SPOTD 50 GAL 15% HCL ACROSS STRAWN PERFS 9693-9718'. PUH, PSA 9580', SOAK PERFS F/2 HRS. BRK DWN & ACIDIZE SAME W/1500 GAL 15% NE, FE & LST HCL @ 1.5 BPM & 600#. TLTR 9T BLW. SWBD 110 BW/6 HRS. F-LVL 200-6000'. SWBD 17 BTF LAST HR, NSO. TR 110 OF 95 BLW. SDON.
6-23	SWBD 136 BW/9-1/3 HRS. F-LVL 3000-7100'. SWBD 15 BTF LAST HR. NO SHOW OIL. TR 246 OF 95 BLW. SDON.
6-24	SDON.
6-25	REL TOOLS & RESET RBP @ 8750'. TSTD SAME TO 2000#, OK. CIRC HOLE W/210 BBL FILTERED PROD WTR. SDON.
6-26	SPOTTED 500 GAL 15% HCL W/NE FE & LST FROM 8692-8180'. POH W/PKR. RU SCHLUMBERGER, PERFORATED WOLFCAMP W/4" CSG GUN 2 JSPF FROM 8642-50', 8676-92' (50 HOLES). RAN 5-1/2" RET PKR ON 2-7/8" TBG PSA 8030'. SWI & SDON.
6-27	BRK DOWN WOLFCAMP PERFS 8642-92' @ 1/4 - 2 BPM & 800-1600#. ISIP 1200 (5) 1100 (10) 950 (15) 850. TLTR 62 BLW. SWBD 53 BW/7 HR. F-LVL SURF-SN @ 8030' & DRY. 300' FLUID ENTRY PER HR LAST 3 HRS. NSO. TR 53 OF 62 BLW. SDON.
6-28	REL PKR @ 8030', RIH, PSA 8513'. SWBD F-LVL TO 8500'. ACIDIZE WOLFCAMP PERFS 8642-8692' W/2500 GAL 15% NE, FE & LST HCL + 75-1.3 SG BS'S TO DIVERT @ 2-3 BPM & 1600-1900#. ISIP 1350 (5) 1200 (10) 1200 (15) 1180. TLTR 125 BLW, SWBD 126 BW/6 HRS. F-LVL SURF-6000'. NO SHOW OIL. TR 126 OF 125 BLW. SDON.



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6-29	1-1/2 HR SITP 0#. SWBD 90 BW/9 HR. F-LVL 4000 - SN @ 8500' & DRY. 200' FLUID ENTRY/HR W/NSO. SDON.
6-30	G FL @ 8000', NSO. REL & POIH W/STRADDLE TOOLS. R&S 5-1/2" CMT RTNR ON 2-7/8" TBG @ 8750'. SQZD PENN PERFS 8843-9268' W/150 SX "H" NEAT @ 15.6 PPG. PMPD @ 2-1/2-1 BPM/1100-2000#. PU F/RTNR & REV CIRC CLEAN. PUT TO 8692' & EQU'D 50 SX "H" NEAT 8692-8261' TO ABON WOLFCAMP PERFS 8642-92'. SDON.
7-1	RAN 4-3/4" BIT ON 2-7/8" TBG & TAG TOC @ 8325'. DSPL CSG W/200 BBL FW PKR FLUID & POH - LD TBG. RDPJ. <u>TEMP OFF REPORT.</u>
8-19	MIRU SUNDOWN WS DDPJ. NU NBOP. RAN 4-3/4" 36 HR SITP 0#. PRES TSTD CSG & SURF EQ TO 1000#, OK. DISP HOLE W/137 BBL 2% KCL PRECEDED W/500 GAL 15% HCL TO PICKLE TBG & CSG PUH TO 6332' & SPTD 500 GAL 15% NE, FE & LST HCL FROM 6332 TO 5819'. TOH. SCHLUMBERGER RAN GR PDC LOG FROM 6400 TO 5120'. PERF 5-1/2" CSG IN CLFK INT W/4" CSG GUN W/2 SPF @ 6256-6332' (58 TOTAL HOLES). F-LVL 600' & STDY. RAN 5-1/2" STRADDLE ASSY ON 2-7/8" TBG. SET RBP @ 6410'. PUH, PSA 5810'. BRK DWN CLFK PERFS 6256-6332' W/SPOT ACID @ 1.1-3.1 BPM & 1450-1100#. ISIP 850 (5) 310 (10) 140 (15) 70. 57 TLTR. SWBD 87 BW/2 HRS. F-LVL SURF-1700'. SWBD 40 BW LAST HR, NSO. TR 87 OF 57 BLW. SDON.
8-20	SDOS.
8-21	W/500 GAL 15% HCL TO PICKLE TBG & CSG PUH TO 6332' & SPTD 500 GAL 15% NE, FE & LST HCL FROM 6332 TO 5819'. TOH. SCHLUMBERGER RAN GR PDC LOG FROM 6400 TO 5120'. PERF 5-1/2" CSG IN CLFK INT W/4" CSG GUN W/2 SPF @ 6256-6332' (58 TOTAL HOLES). F-LVL 600' & STDY. RAN 5-1/2" STRADDLE ASSY ON 2-7/8" TBG. SET RBP @ 6410'. PUH, PSA 5810'. BRK DWN CLFK PERFS 6256-6332' W/SPOT ACID @ 1.1-3.1 BPM & 1450-1100#. ISIP 850 (5) 310 (10) 140 (15) 70. 57 TLTR. SWBD 87 BW/2 HRS. F-LVL SURF-1700'. SWBD 40 BW LAST HR, NSO. TR 87 OF 57 BLW. SDON.
8-22	13 HR SITP 0#. F-LVL 500'. SWBD 380 BW/9-1/2 HRS. F-LVL 500-1700' & STDY. SWBD 40 BTF LAST HR, NO SHOW OIL OR GAS. TR 467 OF 57 BLW. SDON.
8-23	14 HR SITP 0#. SWB 0 BO + 12 BW/0.5 HR W/FL 500' & STDY. TR 479 OF 57 BLW. REL PKR, RETR RBP @ 6410 & RESET @ 6151. SPA @ 6090 & P-TSTD CSG & RBP TO 1000#-OK. SPOT 500 GAL 15% MCA 6090-5578 & POH. RU SCHLUM, PERF'D CLFK USING 4" DP CSG GUN @ 2 SPF: 6062-6090' (38 HOLES - HAD 1 MISS RUN). RIH W/RTTS ON 176 JTS 2-7/8" TBG, SPA 5550 & BRK DN PERFS W/SPOT ACID @ 0.4-3.1 BPM/1700-1200#. ISIP 900, 5/590, 10/290, 15/200. TLTR OF 57 BBLs. SWB 92 BW/2.5 HRS W/FL SURF-3600'. LAST HR: 31 BW W/FL @ 3600' & STDY - NSO. TR 92 OF 57 BLW. SDON.
8-24	14 HR SITP 0#. SWB 0 BO + 71 BW/3 HRS W/FL 400-3600 & STDY. NO SHOWS W/TR 163 OF 57 BLW. REL PKR, RETR RBP @ 6151' & POH, LD TOOLS. R&S HOWCO CMT RTNR @ 6008 ON 2-7/8" WS. SQZD CLFK PERFS 6062-6090' W/84 SX "C" NEAT (14.8 PPG, 1.32 CF/SK, 6.3 GAL WTR/SK) @ 3 BPM/200-1200#. PU F/RTNR & DUMP 16 SX ON RTNR (TOC 5846). PU TO 5816 & DISP 5-1/2" CSG W/130 BBLs 10# MLB. PU TO 5290 & EQUAL'D 20 SX "C" CMT 5290-5088. PU TO 4010 & SDON.
8-25	FTOH, SB 3500' & LD 8AL OF 2-7/8" WS. ND BOP & TBG HEAD, WELD ON LIFT NIPPLE. RU TO PULL & LD CSG, RU APOLLO & JET CUT 5-1/2" CSG @ 3478'. RD APOLLO, PULL & LD 82 JTS + 2 PCS (3466') OF 5-1/2" 17# K-55 & N-88 LT&C ERW CSG. RD CSG CREW & SDON.
8-26	RIH W/OE 2-7/8" WS TO 3528'. EQU'D CLASS "C" NEAT (14.8 PPG, 1.32 CF/SK) CMT PLUGS AS FOLLOWS: 40 SX 3528-3344, 45 SX 3200-3027, 45 SX 1700-1527, 45 SX 1150-977, CIRC 90 SX 300-SURF. LD TBG & RD DDPJ. CUT OFF WHA 3' BGL, WELD ON P&A PLATE & BACK FILL CELLAR. <u>OFF REPORT.</u>