

DAILY DRILLING - WORKOVER LOG

FEB 21 1982

LEASE / WELL

Breitenbush, Oregon, USA 58-28

SPUDDED October 1, 19 81

ELEVATIONS: GND, BH DF RDB

CASING RECORD

| PIPE SIZE | HOLE | SEAT | F. C. | CEMENTING DATA: Sacks, Kind, etc. |
|-------------------|---------|------|-------|--|
| Conductor: 30" | 36 | 55' | | Class A neat cement, 120 cu. ft. |
| Surface: 20" | 26 | 288 | | Class II neat cement, 600 cu. ft. (last 150 cu. ft. 2% CaCl ₂) |
| Intermed: 13 3/8" | 17 1/2" | 2624 | | Class H with spherelite, 40% SSA-1, 5% lime, 4% gel, .35% CFR-2, .5% Halad H-22, 2752 cu. ft. tail |
| Oil String: | | | | with 624 cu. ft. Class H with 40% SSA-1, .5% CFR-2 |

| DATE | DEPTH TODAY | FOOT-AGE | DEGREES OFF | | MUD | | REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.) |
|--------------|----------------|----------|-------------|-------|-----|-----|---|
| | | | DEG. | DEPTH | WT | VIS | |
| 1981 9-30 | SPUD 87 | 87 | | | 8.4 | 38 | Broke tower, rig up SDD tongs, mix mud, set in rat hole pipe, nipples up 20" hydril and bell nipple. |
| 10-1 | 90 | 3 | | | 8.6 | 42 | Nipple up hydril, pick up monel, three 10" drill collars and rig up rig floor, stripping off stack riser and flow nipple to rework hydril flange, run in hole, drilled, rework flange area and retighten, drilling, 17 1/2" hole. |
| 10-2 | 130 | 40 | | | 8.6 | 42 | Repairing flow nipple, drilling, servicing rig, drilling, pull out of hole, run in hole, drilling, servicing rig, work BOPs, drilling, pick up drill collars. |
| 10-3 | 199 | 69 | 1 | 119 | 8.7 | 45 | Drilling, survey and service, drilling, pull out of hole, making up reamer and stabilizer, TIH, hit bridge at 97', ream 97' to 146' after laying down drill collars, pick up drill collars, reaming to bottom, drilling. |
| 10-4 | 249 | 50 | -1 | 184 | 8.8 | 45 | Drilling, pull out of hole, pick up shock sub, TIH with bit #2, break circulation, service rig, work BOP, drilling. |
| 10-5 | 297 | 48 | | | 8.9 | 43 | Drilling, survey, service rig, work BOP, drilling, pull out of hole with bit #2, check bottom hole assembly, TIH with bit #2, drilling, work BOP and service rig, drilling, repairing riser on BOP, drilling, survey, work BOP, drilling, pull out of hole to remove stabilizer, TIH, drilling. |
| 10-6 | 297 | 0 | | | 8.9 | 43 | Drilling, survey, work BOP, drilling, pull out of hole with Bit #2, check bit, run in hole with Bit #2, drilling, work BOP, service rig, drilling, repairing riser on BOP, drilling, wireline survey, drilling, pull out of hole to remove stabilizer, Run in hole, drilling. |
| 10-7 | 342 | 45 | 1 | 223 | 8.8 | 45 | Work BOP, drilling, pull out of hole laying down drill collars, tear out flow line, lay down hydril, service rig, nipple up 30" riser. |
| 10-8 | 113 Reaming | | | | 8.9 | 48 | Nipple up 30" conductor and flow line, making up 26" hole opener and 17 1/2" bit, welding 17 1/2" and 26" tools on, run in hole, service rig, reaming. |

DAILY DRILLING - WORKOVER LOG

LEASE /

WELL

Breitenbush, Oregon, USA 58-28

SPUDED October 1, 1981

| ELEVATIONS: GND, | | BH | | DF | | RDB | |
|------------------|-------------|----------|-------------|-----------------------------------|-----|-----|--|
| CASING RECORD | | | | | | | |
| PIPE SIZE | HOLE | SEAT | F. C. | CEMENTING DATA: Sacks, Kind, etc. | | | |
| Conductor: | | | | | | | |
| Surface: | | | | | | | |
| Intermed: | | | | | | | |
| Oil String: | | | | | | | |
| DATE | DEPTH TODAY | FOOT-AGE | DEGREES OFF | | MUD | | REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.) |
| | | | DEG. | DEPTH | WT | VIS | |
| 10-21 | 1,945 | 288 | 2 | 1765 | 9.3 | 40 | Drilling, service rig, work BOP, short trip, hole OK, survey misrun at 1,702', drilling, survey at 1,765', drilling, survey at 1,860'. |
| | | | 1 3/4 | 1860 | | | |
| 10-22 | 2,321 | 376 | 1 | 1971 | 9.2 | 42 | Drilling, service rig, work BOP, misrun of survey, survey at 1,971', lay down single and work tight spot at 2,000', drilling, survey and service rig at 2,125', drilling. Losing 18 bbl./hr. mud. |
| | | | 1 1/2 | 2125 | | | |
| 10-23 | 2,584 | 263 | 1 3/4 | 2883 | 9.3 | 41 | Service rig, work BOP, and survey at 2,383', drilling, survey at 2,470', rig repair #3 cat, drilling. |
| | | | 1 7/8 | 2470 | | | |
| 10-24 | 2,659 | 75 | | | 9.3 | 43 | Service rig and work BOP, drilling, circulate and condition hole, pull out of hole, rig up Schlumberger, run temperature log, sonic, CNL, and DIL. |
| 10-25 | 2,659 | 0 | | | 9.3 | 42 | Finish running electric logs, TIH with rerun bit, ream last 12' to bottom, circulate to run casing, pull out of hole, lay down drilling assembly, rig up to run 13 3/8" casing, run total of 65 jts. K55 61# 13 3/8 casing with float shoe and float collars, 12 centralizers 2624.07', rig up circ. head, circulate before cement job, cement 13 3/8 csg. with 782 sacks (2752 cu. ft) type H cmt. mixed with 50#/sack of spherelite, 40% SSA-1, 5% lime, 4% gel, .75% CFR-2, .5% Halad 22-A, tailed with 385 sacks type "H" cement, mixed with 40% SSA-1, .5% CFR-2. |
| 10-26 | 2,659 | 0 | | | | | Wait on cement, slacked off on casing, cement good, cut off casing, weld on casing head, building BOP stack, nipling up. |
| 10-27 | 2,659 | 0 | | | | | Nipling up. |
| 10-28 | 2,670 | 11 | | | | | Nipple up BOP, changing rams, replacing door gaskets, testing BOP stack, observed by USGS representative, bottom pipe rams, top pipe, and CSO held 1,000# PSI for 15 minutes, service rig and again work BOP, make up #5 bit, TIH, lay down 3 stds. drillpipe, finish TIH, tag cement at 2,533', drill FC, cement and float shoe at 2,622', drilling. |

DAILY DRILLING - WORKOVER LOG

LEASE /
WELL

Breitenbush, Oregon, USA 58-28

SPUDED October 1, 1981

| ELEVATIONS: GND, _____ | | BH _____ | | DF _____ | | RDB _____ | |
|------------------------|-------------|----------|-------------|----------|-----|-----------------------------------|---|
| CASING RECORD | | | | | | | |
| PIPE SIZE | | HOLE | SEAT | F. C. | | CEMENTING DATA: Sacks, Kind, etc. | |
| Conductor: | | | | | | | |
| Surface: | | | | | | | |
| Intermed: | | | | | | | |
| Oil String: | | | | | | | |
| DATE | DEPTH TODAY | FOOT-AGE | DEGREES OFF | | MUD | | REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.) |
| | | | DEG. | DEPTH | WT | VIS | |
| 11-9 | 4430 | 5 | | | 9.0 | 40 | Drilling, service rig, work BOP, POOH, after twisting off, making up fishing assembly, TIH and getting over fish with overshot, top of fish 4,287', POOH with fish, pull slow wet, chain out, recovered all of fish, break down same, change out monel collars, change out shock sub, break and dope drilling assembly, pick up new stabilizer, pick up 8" collars and jars, run in. |
| 11-10 | 4747 | 317 | 2¼ | 4529 | 9.1 | 38 | Finish TIH with bit #8, break circulation, drilling, work BOP, drilling, survey at 4,529', drilling. |
| 11-11 | 5015 | 268 | 2½ | 4748 | 9.1 | 42 | Survey, work BOP, drilling, survey, drilling. |
| | | | 2½ | 4964 | | | |
| 11-12 | 5158 | 143 | | | 9.1 | 38 | Drilling, work BOP and service rig, drilling, POOH, chain out looking for washout, washout occurred at crossover on bottom of jars, lay down one 8" drill collar, crossover sub, and jars, pick up new jars, crossover and drill collars, torqueing BHA and checking bit, TIH with bit #8, break circulation and drill. |
| 11-13 | 5360 | 202 | 2½ | 5178 | 9.2 | 42 | Survey to 5,178, work BOPs and service rig, drlg. |
| 11-14 | 5489 | 129 | 3 | 5397 | 9.3 | 48 | Service rig, work BOPs, drilling, survey at 5,397', round trip with bit #8, cut drill line, ream to bottom, drilling. |
| 11-15 | 5500 | 11 | 2½ | 5489 | 9.2 | 48 | Survey, service rig, work BOPs, drilling, twisted off, left bit, reamer, shock sub, monel, one 10" drill collar, one stabilizer in hole, POOH, lay down 10" drill collar with twisted off box and stabilizer, pick up 10" drill collar and stood back, make up 11 3/4 overshot with 9" grapple, tripped in hole, worked over fish, POOH with fish, layed down overshot and stabilizer and pulled to bit, checking bottom hole assembly. |
| 11-16 | 5500 | 0 | | | 9.2 | 48 | Inspecting BHA, laying down bad 10" and 9" drill collars, monel, stabilizer, and crossover, pick up new BHA, going in hole at 7 a.m. |
| 11-17 | 5705 | 205 | | | 9.1 | 39 | Service rig, work with BOPs, tripped in hole, drlg. |

DAILY DRILLING - WORKOVER LOG

LEASE /
WELL

Breitenbush, Oregon, USA 58-28

SPUDDED October 1, 19 81

ELEVATIONS: GND. _____ BH _____ DF _____ RDB _____

CASING RECORD

| PIPE SIZE | HOLE | SEAT | F. C. | CEMENTING DATA: Socks, Kind, etc. |
|-------------|------|------|-------|-----------------------------------|
| Conductor: | | | | |
| Surface: | | | | |
| Intermed: | | | | |
| Oil String: | | | | |

| DATE | DEPTH TODAY | FOOT-AGE | DEGREES OFF | | MUD | | REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.) |
|-------|-------------|----------|-------------|-------|-----|-----|--|
| | | | DEG. | DEPTH | WT | VIS | |
| 11-26 | 6,680 | 111 | 3 3/4 | 6653 | 9.0 | 41 | Finish making up BHA, TIH to shoe, break circulation, TIH to 6,449', break circulation wash to bottom, drilling, service rig, work BOP, drilling, survey at 6,653', stuck same in top of shock sub, POOH, cutting slick line, retrieved survey in BHA, checked bit, TIH to 5,950', filled pipe, broke circulation, TIH to 6,500', break circulation, washed to bottom, drilling. |
| 11-27 | 6,960 | 280 | 3 1/2 | 6790 | 9.1 | 38 | Drilling, service rig, work BOP, drilling, survey at 6,790', drilling, survey at 6,960'. |
| | | | 4 | 6960 | | | |
| 11-28 | 7,065 | 105 | 4 | 6960 | 8.9 | 38 | Survey at 6,960', service rig, work BOP, drilling, check pumps, POOH, chain out, two washouts, found on bottom jt. of 5" drillpipe next to hevi-wall drillpipe, washouts were in the tube section of drillpipe about one foot in from tool joint upset, finish POOH, checking BHA, found worn out pin on reamer cutter, service reamer, while installing new cutters and components on reamer, discovered worn place on reamer body, laid down same. |
| 11-29 | 7,188 | 123 | 3 1/2 | 7114 | 9.0 | 39 | Picked up new reamer body, assembled new cutters, pins, TIH to shoe, fill pipe, break circulation, finish TIH, break circulation, wash to bottom, work BOP, drilling, survey at 7,114', drilling. |
| 11-30 | 7,229 | 41 | | | 9.0 | 39 | Service rig, work BOP, drilling, TIH, chain out, drillpipe washed out in sump area, 4th joint up from top of hevi-wall, 195 jt. from top, pick up new bit, change out reamer and stabilizers, run BHA in hole, lay down 20 jts. of drillpipe off of bottom O-string, picked up 20 jts. from rack, TIH to shoe, fill pipe, break circulation, TIH to 7,130', break circ. wash to bottom, drilling, POOH, chain out, look for washout. |
| 12-1 | 7,353 | 124 | 4 | 7255 | 8.9 | 39 | Service rig, work BOPs, slip and cut drill line, TIH, broke circulation at bottom of casing, wash to bottom, drilling, wireline survey. |

