

GL01026

N Baroid Petroleum Services

April 1980

Mr. Brian Rakestraw,
C/- Chevron Resources,
P.O. Box 5355,
Bakersfield, California, 93308

Dear Brian,

On behalf of Baroid I would like to thank you and Chevron for allowing us to service Beowawe 85-18 in the Geyser area. We hope to continue to enjoy the good working relationship with Chevron on future wells.

Your Post Well Audit is enclosed and will give details of the operations of this well.

If you should have any questions/comments on this summary or any aspect of the job, please feel free to call me.

Sincerely yours,

Daryl Thomas
(Daryl Thomas)
SALES ENGINEER

DT:rh



OPERATIONS

| Date | Depth, Ft. | Cost | |
|----------|------------|-------|--|
| February | | | |
| 23rd | 0 | 770 | Spud rat hole, Aguagel and lime |
| 24th | 65 | 770 | Drill ahead to 65' with 12½ bit no 1 |
| 25th | 94 | 1110 | Bit change no. 2 17½ Drill to 94' |
| 26th | 106 | 1535 | Drill to 106' POOH change bit to H.O. 26" RIH to 106' Circulate for conductor POH RIH w/17½ bit ream |
| 27th | 106 | 1710 | Open hole from 17½ to 26" depth 45' to 106' |
| 28th | 110 | 1944 | From 17' to 106'. Drill to 110' w/17½ |
| 29th | 106 | 1944 | POOH. Run 20" conductor to 60' D.J. Hughes cement. |
| March | | | |
| 1st | 106 | 1944 | Make up 17½" bit ass. No drilling, Maintain rig. RIH w/17½" bit No. 4. Drill cement from 51' to 110' to 131' |
| 2nd | 127 | 2541 | Treat for cement w/bicarb of soda. Lost 10 bbls. POOH bit change to 17½ no. 5. Lost 15 bbls. |
| 3rd | 248 | 3009 | At 180'. Using lignosulfonate mud. Drilling from 248 to 353. Rig down 3 hrs. |
| 4th | 343 | 3470 | For work on Kelly, dumped sand trap rebuild volume. Drill to 371' POOH but change to No. 6. 17½" |
| 5th | 400 | 4020 | Drill ahead to 400' Lost 6 bbls to formation problems w/fill on each connection. Increase |
| 6th | 653 | 4745 | Aquagel for vis. Survey at 468'. |
| 7th | 857 | 5832 | Drill ahead. Survey at 770' Drill to 857 |
| 8th | 1008 | 5974 | Drill to 1008' wipe hole. POOJ for casing. |
| 9/10/11 | 1008 | 5974 | No mud report for three days. casing & cement 9,10,11 RIH w/ no 1 R.R. 12½ tag plug at 954. Drill out baffle |
| 12th | 1120 | 6830 | Cement to shoe 1006'. Hook up mud cooler. Lost 7bbls P.O. Bit No. 7 12½. Ream 1007' - 1120 Lost circulation |
| 13th | 1240 | 7368 | 10 bbls. Regain circ. Test BOP. Drill ahead |
| 14th | 1450 | 8444 | Drilling, POOH change bit No. 8 12½. Mud temp in & out 134° - 144°. |
| 15th | 1671 | 9458 | Drilling ahead. Lost 13 bbls to formation at 1640' to 1680'. Started use of mud cooler. Before mud cooler, temp 144 out 147° - 162°. |
| 16th | 1838 | 11025 | After mud cooler temp out 87° - 106°. Drilling ahead. Lost circulation at 1842' no mud in pits to test. |



OPERATIONS

| Date | Depth, Ft. | Cost XXX | |
|-------|------------|-------------|---|
| March | | | |
| 17th | 1842 | 13,643 | Rebuilt Vol. W/LCM and aquagel. Lost circ again, drilling blind. |
| 18th | 2034 | 17,018 | Running gel & water sweeps & drilling blind w/water |
| 19th | 2154 | 18,384 | Running gel & water sweeps w/flocc mud. Drilling blind w/water. POOH for bit change. RIH w/bit No. 9 12½". Drilling blind w/water. |
| 20th | 2208 | 19,602 | Regain circulation, circ & condition mud. Recommend return to Lignite mud w/filtration cont. |
| 21st | 2287 | 19,879 | Drilling, Survey. POOH RIH w/D.D. losing 12 bbls per hr. |
| 22nd | 2345 | 20,263 | Drilling ahead w/bit No. 10 12½ losing 8bbls per hr. |
| 23rd | 2437 | 21,567 | POOH for bit change, RIH w/bit NO 11 12½. Losing 10 bbls |
| 24th | 2569 | 22,937 | Survey 2569. RIH w/D.D. Run mud cooler in & out 1620 1720. Drilling survey at 2575. POOH for bit trip, change to bit no 11RR at 2603. RIH drilling. Mud temp |
| 25th | 2605 | 23,474 | Drilling 24 hrs. survey 2732 |
| 26th | 2790 | 24,587 | Pulled up to shoe for rig repairs. Wt. of mud went from 8.9 - 9.2 as a result of using Barite to mix dry job. Lost 200 bbls of mud to formation and mud cooler leak. Has to rebuild volume. POOH for bit change and |
| 27th | 2900 | 26,795 | broke off at the shock sub. RIH with fishing tool. Recovered BHA with fishing tool. Made up new BHA & RIH. Lost circulation at 2044. (350 bbls). |
| 28th | 2974 | 27,706 | Pumped oil, pulled to 1678'. Pumping gel. No returns. Pumped 300 barrels of water. POOH. Changed BHA RIH. Charged for 21 cottonseed, cottonseed was not used. |
| 29th | 2974 | 29,155 | In the mud for LCM. Cottonseed was used for clean up. Drilling blind last 24 hrs. Some fill coming in. Used walnut for LCM. waiting for deisel. One rig crew |
| 30th | 2974 | 30,140 | worked 24 hrs. RIH & pumped one pit of mud. Pulled to shoe and wait. Mix and pumped 3 pits of mud. No returns. Pull to shoe and wait. |
| 31st | 3149 | 33,901 | RIH. 40 feet of fill. Mix mud. POOH a mix gel pill. PIH w/20' of fill. POOH pump gel pill w/vis of 160 |
| April | | | |
| 1st | 3149 | 36,225 | |



OPERATIONS

| Date | Depth, Ft. | Cost | |
|-----------------|------------|--------|---|
| April | | | |
| 2nd | 3149 | 39,103 | Wait on pill. RIH no fill. POOH assemble core. RIH with core assembly. Pump gel and water w/vis of 50 while coring. POOH and analyze core. |
| 3rd | 3149 | 42,173 | Make up BHA. Analyze mud make up water. RIH & hit bridge at 1935' to 1965' and 2118 to 2145' |
| 4th | 3176 | 43,329 | Hit bottom hole fill at 3045. Pump mud and drill fill. |
| 5th thru to 8th | | | Unknown |
| 9th | 3208 | | Circ to T.D. w/80 vis - 15% LCM - Gel/water to clean bridges and condition hole. Stage in DP 3-5 stds @ a time. Pull back to show @ 1006 and left hole stand 3-4 hrs. GIH to 2950' - condition hole to sand back from 3200' to 2900' - bridge @ 1344'-5' thick hole clean to TD. |
| 10th | 3208 | | POOH - Lay down 7 3/4 DC'S and BHA. Std back. Heavy wall DP Rig up BJ to spot sand plug at TD. Pump 57 5X 6 X 12 gravel - BJ pumps down - rig up Baroid pump for mud cooler - POH to shoe and circulate hole. Waiting on gravel packer from Bakersfield (Flonic) |
| 11th | 3208 | | Circ and cond mud/hole. Rig up cooler and begin circ. 11:30am WO Gravel packer. Circ to 3:00pm - Rig up Gravel packer - pump gravel plugs - fill back to 2950'. |
| 12th | 2950 | | Stage bit w/DP into hole and condition and circulate/condition mud to run 9 5/8 (liner) - Run mud cooler. Ran bit # 7. POOH to run casing. Stage csg into hole to 1000'. Circ 30 min - stage in at 500' intervals thereafter and circulate for 30 minutes @ time. Rigging up Haliburton to cement liner (9 5/8). Cost |
| 13th | 2950 | | \$69702.81. Bakerline 9 5/8 liner hanger won't fit thru master valve on BOP stack - Pull 9 5/8 csg and lay down. |
| 14th | 2950 | | Lay down 9 5/8 csg - set Halibuton packer in 13 3/8 Rig down BOPE - remove value - welding on BOPE |
| 15th | 2950 | | Rig up BOPE and attempt to test - packer won't hold pull packer - P.U. DP and mill tooth bit #1 RR - Run in hole staging into shoe broke circulation/condition hole - stage in to 2950' - POOH to rerun 9 5/8 liner. Set BOPE test plug and test BOPE - OK. |
| 16th | 2950 | | Run in 9 5/8 - 40# csg - staged @ 2000' circ 15 min, and TD circ min. Rig Haliburton and cement - WOC - Cond mud for drlg out |

... cont



OPERATIONS

| Date | Depth, Ft. | Tour |
|----------|------------|--|
| April 16 | 2950 | <p>continued.....</p> <p>cement and circ out gravel to 3208.</p> |
| 17th | | <p>Run 51 Jts. 9 5/8 - 40#, N-80 buttress csg. Rig up Haliburton.</p> <p>Hang liner w/bakerline. Preflush N/100 bbls. H₂O, 100 bbls, CaCl₂,</p> <p>100 bbls Sodium Silicate 100 bbls H₂O + 1800 ft³ (200% excess)</p> <p>Class G. 1:1 perf-a-lite w/.5% CFRZ, 3% gel 40% Silica Fl., dis-</p> <p>placed w/\pm 950 ft³ mud-fill returns until last 50ft³ - lost</p> <p>returns. Top of liner @ 794' Liner shoe 2946' cement in place @</p> <p>1:10am @ 9:00am. Wait on Haliburton for squeeze job on liner lap.</p> <p>RIH w 12$\frac{1}{2}$ bit and tag hanger - pressure up hole to 200psi, didn't</p> <p>hold - POOH to run squeeze.</p> |
| 18th | | <p>WO Haliburton @ 10:15am - 12:00noon - attempt to squeeze after</p> <p>setting - RTTS bridge plug - plug didn't hole. Pull plug and</p> <p>service - run back in w/plug attempt to squeeze.</p> |
| 19th | 2950 | RIH tag cement, drlg out cement. RIH drlg out gravel. |
| 20th | 2950 | Drlg out gravel to T.D. Circ and cond mud W.O. temp survey. |
| 21st | 2950 | Run temp. Surveys RIH. Circ and Condition. Mud rig up. DST |
| | | tools RIH slow set packer at 2935'. |
| 22nd | 2950 | Rig up for DST. Test drill stem shut in N ₂ DST/close in test. |
| | | Tear out DST POOH. |
| 23rd | 3281 | Run wireline log. Make up new RHA. RIH to 1500'. Circ RIH to |
| | | 2000'. Circ RIH to 2500' & circ. RIH to 3208' and circulate. Drill |
| | | to 3220' - 40' fill w/connections. Circ and condition mud. Drill |
| | | to 3281'. |
| 24th | 3427 | Drill to 3281' POOH make up BHA RIH circ at 2010' RIH circ at |
| | | 2608'. RIH Drill 8 3/4" hole. Take deviation survey at 3305' 1° |
| | | inclination. Drill ahead. |
| 25th | 3673 | Drlg from 3367'. Circ and survey at 3427'. Work on pimp. Circ and |
| | | build volume of mud. Drill to 3673'. |
| 26th | 3825 | Drill f/3673'. Circ at 3744' POOH to shoe. Work on FXO pump. Circ |
| | | and build volume at shoe. RIH Drlg f/3744'. Drill f/3805 with |
| | | plugged bit. Drlg with 8 3/4. Rot. Torgue. Circ and condition mud. |
| | | POOH. |
| 27th | 3835 | POOH, lost cone off a bit, wait on temp surveyor's to arrive. |

IN
BALDWIN

OPERATIONS

| Date | Depth, Ft. | Tour | |
|-------|------------|------|---|
| April | | | Run temp survey's. Work on water pump. Make up new BHA. RIH to 992'. Dump pits and clean Mix mud in pits |
| 29th | 3825 | | Ream to bottom, rig up temp surveys. |
| 30th | 3825 | | Run five temp surveys. Circ. Ream F/3826. Work on junk at 3826'. Circ and work pipe. POH make up new BHA and RIH with magnet. |
| May | | | RIH to 1000' circ. RIH at 2500' Circ. RIH. |
| 1st | 3956 | | RIH. Circ. Work on junk. POH cone and iron in junk basket & magnet. RIH to 1500'. Circ. RIH to 3525'. Circ and cond mud. Drill 8 3/4" hole f/3826'. Run divation survey at 3956'. |
| 2nd | 4039 | | Drlg ahead. survey at 3940'. Drlg ahead to 4039'. POH for new bit. |
| 3rd | 4039 | | POH lay down Jars. Clean out junk sub. Tear out draw work engine. Swap out #2 Engine, wait on tools. make up new bit. |
| 4th | 4105 | | RIH to 1500'. Circ RIH to 2500'. Circ. RIH. Tight hole at 3836'. Circ and condition mud. Ream f/3836' to 4039'. Drill ahead. |
| 5th | 4224 | | Drlg ahead. f/4105 to 4224. POH for new bit. |
| | 4373 | | RIH with new bit. Circ at 2500'. Drlg ahead f/4313. |
| 7th | 4532 | | Drill f/4313 to 4532. Run temp surveys. |
| 8th | 4532 | | Run six temp surveys POH Circulate at 2900'. |
| 9th | 4532 | | RIH to 4530'. Circ. Wait on wireline loggers Circ and mix mud. |
| | | | POH. Rig up wireline loggers. |
| 10th | 4532 | | Log hole |
| 11th | 4532 | | Log hole |
| 12th | 4652 | | POH w/logs and rig down loggers. Make up new bit. RIH to 1500' circ RIH to 2900'. Circ (out temp 150°) RIH to 3700' circ (out temp 169°) RIH to 4540'. Drill ahead. |
| 13th | 4845 | | Drill ahead to 4795'. |
| 14th | 4985 | | Drill f/4798' to 4859' Circ POH for bit #20. Pick up new bit RIH Circ at 2900'. Circ at 3500'. Drill/4915. |
| 15th | 5111 | | Drill f/4915 to 5111 Circ and POH for new bit. |
| 16-18 | 5111 | | Rig broke down. Repair clutch |
| 19th | 5111 | | Work on rig. |
| | 5221 | | Work on rig. POH, service drill collars. Test BOP (test OK) RIH drill ahead. |
| 1st | 5320 | | Drill ahead to 5320'. POH 15 stands work plogged bit. |
| 2nd | 5502 | | Drill ahead. |

COMMENTS &
DRILLING HAZARDS

FORMATION

DEPTH

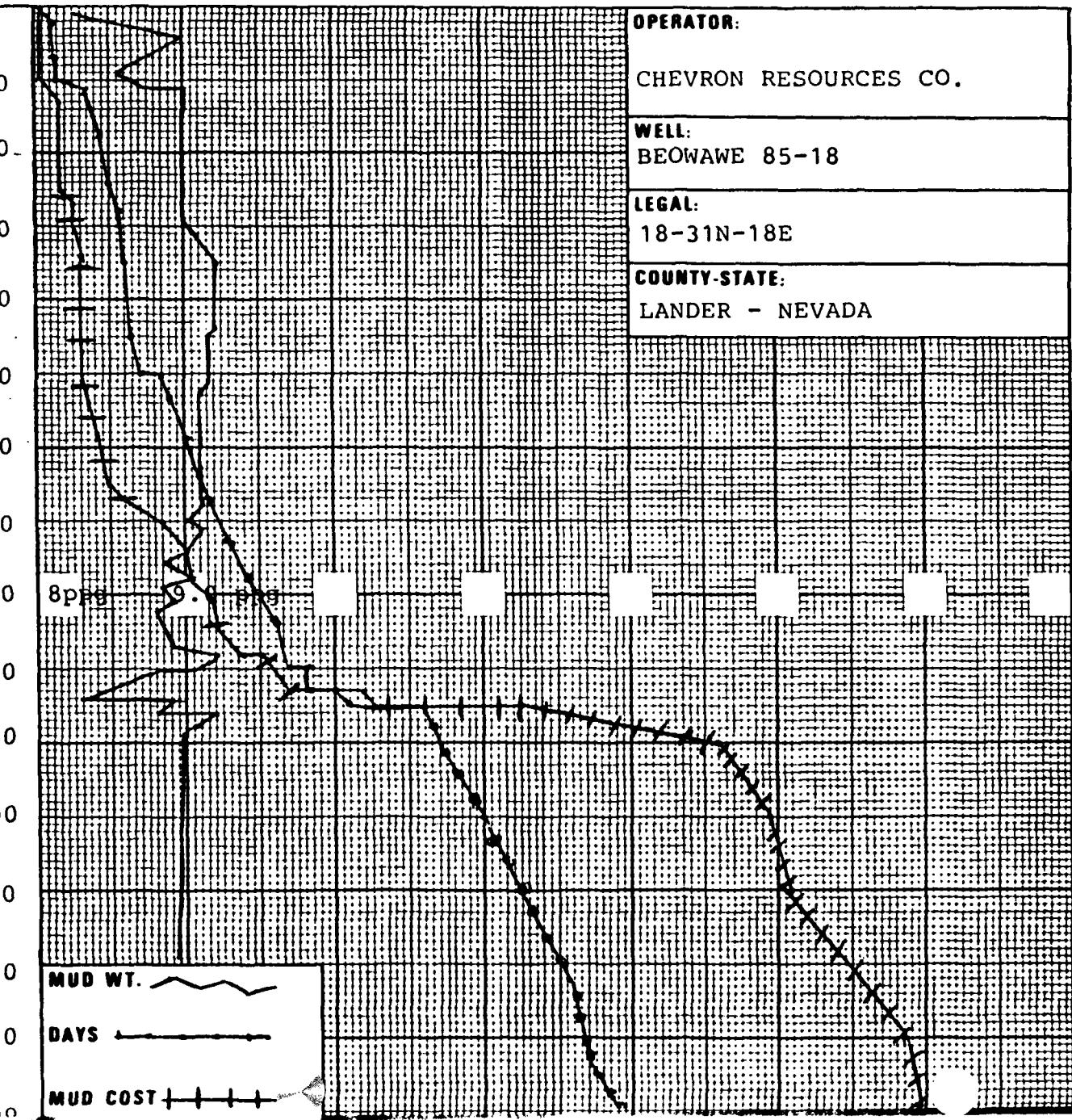
N Baroid**GRAPHIC PROGRAM**Change to Lignosulfonate
at 110'

Set 13 3/9" casing 1006'

Lost circulation 1842'

Fishing for shock sub &
lost circulation 2974'

Coring 3149'



OPERATOR:

CHEVRON RESOURCES CO.

WELL:
BEOWAWE 85-18LEGAL:
18-31N-18ECOUNTY-STATE:
LANDER - NEVADA

BIT AND DRILL STRING RECORD

**Baroid
Petroleum Services**

MATERIALS

| 1980 | | Aquagel | Baroid | Carbonox | Caustic | Coat-45 | Cotton seed | cyan | CC-16 | Fibertex | Kwik-seal | Lime | Surflok 35 | QBroxin | Fin Wallnut | Bicarb | Coarse Wnnt | Quik-gel | Baroid Pump | Mud Trailors |
|-------|-----|---------|--------|----------|---------|---------|-------------|------|-------|----------|-----------|------|------------|---------|-------------|--------|-------------|----------|-------------|--------------|
| Feb | | | | | | | | | | | | | | | | | | | x | x |
| 23rd | | | | | | | | | | | | | | | | | | x | x | |
| 24th | 94 | | | | | | | | | | 2 | | | | | | | x | x | |
| 25th | 42 | | | | | | | | | | 1 | | | | | | | x | x | |
| 26th | 54 | | | | | | | | | | | | | | | | | x | x | |
| 27th | 21 | | | | | | | | | | 1 | | | | | | x | x | | |
| 28th | 20 | 3 | | | | | | | | | | | | | | | x | x | | |
| March | | | | | | | | | | | | | | | | | | | x | x |
| 1st | | | | | | | | | | | | | | | | | x | x | | |
| 2nd | 22 | 1 | | | | 1 | | | | | 5 | 3 | | | | | x | x | | |
| 3rd | 15 | 3 | | | | 1 | | | | | 4 | | | | | | x | x | | |
| 4th | 48 | | | | | | | | | | 4 | | | | | | x | x | | |
| 5th | 37 | 2 | | | | 1 | | | | | 2 | | | | | | x | x | | |
| 6th | 44 | 2 | | | | 2 | | | | | 2 | | | | | | x | x | | |
| 7th | 94 | 2 | | | | 2 | | | | | 1 | | | | | | x | x | | |
| 8th | 8 | 1 | | | | | | | | | 1 | | | | | | x | x | | |
| 9th | | | | | | | | | | | | | | | | | x | x | | |
| 10th | | | | | | | | | | | | | | | | | x | x | | |
| 11th | | | | | | | | | | | | | | | | | x | x | | |
| 12th | 7 | 1 | | | | 1 | | | | | | 4 | | | | | x | x | | |
| 13th | 10 | 2 | 2 | | | 2 | | | | | 2 | | | | | | x | x | | |
| 14th | 17 | 7 | 1 | | | 4 | 2 | | | 2 | 8g | 3 | 2 | | | | x | x | | |
| 15th | 10 | 3 | 2 | | | 2 | 4 | 4 | 2 | | 4g | 2 | | | | | x | x | | |
| 16th | 21 | 6 | 3 | | | 2 | 6 | 9 | 1 | | 4g | 3 | | | | | x | x | | |
| 17th | 118 | 2 | | | | 33 | 2 | 5 | 35 | | 2g | 10 | | | | | x | x | | |
| 18th | 223 | | 10 | 146 | | | 5 | 5 | | | | | | | | | x | x | | |
| 19th | 154 | | | | | | | | 1 | 5 | | 1 | | | | | x | x | | |
| 20th | 119 | | 2 | | | | | | | 2 | | | 2 | | | | x | x | | |
| 21st | 25 | | | | | | | | | 1 | | | 1 | | | | x | | | |
| 22nd | 14 | | 1 | | | | 3 | | | | | | 15 | | | | x | | | |
| 23rd | 64 | 11 | 4 | 2 | | 2 | 4 | | | | 3 | | 12 | | | | x | | | |
| 24th | | 15 | 5 | 2 | | 4 | 8 | 1 | | | | | 18 | | | | | | | |
| 25th | | 10 | 2 | | | 2 | 2 | | | | | | 8 | | | | | | | |
| 26th | | 12 | 2 | | | 6 | | | | | | | 27 | | | | | | | |

Baroid Petroleum Services

MATERIALS

Baroid Petroleum Services

MATERIALS

| | | Aquageel | Baroid | Carbonox | Caustic | Cypan | CC-16 | Lime | Bicarb | Quik-gel | | Baroid Pump |
|-------|------|----------|--------|----------|---------|-------|-------|------|--------|----------|---|-------------|
| April | 29th | 40 | | | 2 | 1 | | | 15 | | x | |
| | 30th | | | | | | | | | | x | |
| May | 1st | | 10 | | | 1 | | | 23 | | x | |
| | 2nd | | 10 | | 3 | 3 | | | 1 40 | | x | |
| | 3rd | 5 | 20 | 8 | | 1 | 15 | | 20 | | x | |
| | 4th | | | | | | | | | | x | |
| | 5th | | | | | 4 | 20 | 2 | 60 | | x | |
| | 6th | | | | | 1 | 5 | | 20 | | x | |
| | 7th | 7 | | | | | | | 10 | | x | |
| | 8th | | | | | 1 | 4 | | 35 | | x | |
| | 9th | 30 | | | | 1 | 1 | | | | x | |
| | 10th | 8 | | | | | | 1 | 23 | | x | |
| | 11th | | | | | | | | | | x | |
| | 12th | | | | | | | | | | x | |
| | 13th | 10 | | | | 1 | 2 | | 20 | | x | |
| | 14th | 26 | | | | 2 | 1 | | | | x | |
| | 15th | 25 | 15 | 1 | 2 | 1 | 5 | | 10 | | x | |
| | 16th | 25 | | | | 1 | | | | | x | |
| | 17th |) | | | | | | | | | x | |
| | 18th |) | | | | | | | | | x | |
| | 19th |) | | | | | | | | | x | |
| | 20th |) | | | | | | | | | x | |
| | 21st | 32 | | | | 3 | 2 | 2 | | | x | |
| | 22nd | 35 | | | | 4 | 2 | 1 | | | x | |
| | 23rd | 50 | | | | 4 | 3 | 12 | | 25 | x | |
| | 24th | 16 | | | | 2 | 2 | | | 15 | x | |
| | 25th | | | | | 1 | 2 | 1 | | 38 | x | |
| | 26th | 18 | | | | 3 | 2 | | 23 | | x | |
| | 27th | | | | | | Pump | 29 | | | x | |

DAILY PROGRESS DRILLING REPORTS

FEBRUARY 22-JUNE 3, 1980

DAILY PROGRESS OF DRILLING WELL 10-562

DRILLING DAYS _____ CUM. ROTATING HRS. _____

2-22 19 80

WELL NO. DOE 85-18 FIELD BEOWAWE NEVADA CONTRACTOR KENAI # 7

| DEPTH | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
|-------|---------|------|-----------|------|-------|------------|-----------|
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | FT. TO | FT. | IN | HRS. | 1000# | WT. ON BIT | SPEED |

DRILLING SETUP _____

LAST CASING SIZE AT DEPTH FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

| DRLG. FLUID | MUD CO. | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
|-------------|---------------|------------|--------|------------------|--------------|-----------------|---------------|--------|
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | 132 FILTER CAKE | SOLIDS % | SAND % |
| CHLORIDE | OIL | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | |

SURVEYS _____

DETAIL CONT. TO RIG UP @ GAM.

CUMULATIVE MUD COST _____ CUMULATIVE DAILY COST _____ DRILLING REPRESENTATIVE SAS / RJA _____

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS #562

DRILLING DAYS 1 CUM. ROTATING HRS. 6

2-23 1980

WELL NO. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

DEPTH _____ BIT NO. 1 SIZE 12 1/4 SEC. M4N 16 FEET HOURS 6 JETS 15 1/2 15 IN. CONDITION

BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS 11 CONDITION

FROM _____ FT. TO _____ FT. IN _____ HRS. 1000# WT. ON BIT RPM SPEED

DRILLING SETUP _____

LAST CASING SIZE AT DEPTH FORMATION PUMP PRESS. PSIG SPM

PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

DRILLING FLUID BAROID MUD CO. GEL TYPE 8.6 PCF 70 FUNNEL VISC. SEC. PLASTIC VISC. CPS

#/100 SQ. FT. CC CC 132 % %
YIELD PT. WATER LOSS HT-HP WATER LOSS FILTER CAKE SOLIDS SANDCHLORIDE PPM % PPM pH ALK GALS (% MIN.) OTHER REMARKS
OIL CA

SURVEYS

DETAIL RIG UP. STARTED OPERATIONS 9PM 2-22-80. WENTERIZED
RIG + INSTALLED WIND WALLS + BLOWERS. SPUD RAT HOLE
@ 12AM. DYNADRIID RAT HOLE FROM 15'-31' @ 6AM.LOCATION: 2960' SOUTH, 80' WEST OF NE CORNER
OF SEC. 18 31N, 48E MDBM.
ELEV. ~ 4920'.CUMULATIVE
MUD COST

340

CUMULATIVE
DAILY COST

85,848

DRILLING REPRESENTATIVE

SAS/RJA

RIG PHONE NO. 702-635-5556

DAILY PROGRESS OF DRILLING WELLS 10-562

DRILLING DAYS 2 CUM. ROTATING HRS. 22½

2-24 19 80

WELL NO. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | |
|-----------------|------------------|--------------------|---------------------------|----------------|-------------------------|----------------|----------------|
| DEPTH <u>65</u> | BIT NO. <u>1</u> | SIZE <u>12 1/4</u> | MAKE-TYPE <u>SEC M4YN</u> | FEET <u>40</u> | HOURS <u>15</u> | JETS <u>15</u> | T-3 <u>B-2</u> |
| | BIT NO. <u>2</u> | SIZE <u>17 1/2</u> | MAKE-TYPE <u>SEC M4YN</u> | FEET <u>50</u> | HOURS <u>7 1/2</u> | JETS <u>20</u> | JAC. |
| FROM <u>15</u> | FT. TO <u>65</u> | FT. <u>50</u> | IN <u>7 1/2</u> | HRS. <u>3</u> | WT. ON BIT <u>1000#</u> | SPEED | RPM |

DRILLING SETUP BIT, BIT SUB, DYNNA, 2-X-OVER, KELLY

| | | | | | |
|-------------|---------------|------------------|-----------------|---------------|---------------|
| LAST CASING | AT | FORMATION | PUMP PRESS. | PSIG | SPM |
| SIZE | DEPTH | | | | |
| PUMP OUTPUT | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. |
| DRLG. FLUID | <u>BAROID</u> | <u>GEL</u> | <u>8.9</u> | PCF | <u>80</u> |
| MUD CO. | | TYPE | WEIGHT | FUNNEL VISC. | SEC. |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | 132 | CPS |
| | | HT-HP WATER LOSS | CC | FILTER CAKE | PLASTIC VISC. |
| CHLORIDE | PPM | % | ALK | SOLIDS | % |
| OIL | PPM | CA | pH | GALS (% MIN.) | SAND |
| CA | | | | | OTHER REMARKS |

SURVEYS

DETAIL DYNNA DRILLED RAT HOLE F1 31-55. SET RAT HOLE, MIL
17 1/2" BIT. DYNNA DRILLED FOR COND. F1 15-65 @ 6AM.

CUMULATIVE MUD COST 770CUMULATIVE DAILY COST 97,133DRILLING REPRESENTATIVE SAS/RJARIG PHONE NO. 702-635-5556

DAILY PROGRESS OF DRILLING WELLS 10-562

DRILLING DAYS 3 CUM. ROTATING HRS. 34½ 2-25 1980

| | | | | | |
|---|--------------|---------|----------------|------------|--------------------|
| WELL NO. | <u>85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> |
| DEPTH | <u>94</u> | BIT NO. | <u>2</u> | SIZE | <u>17½</u> |
| | | | | MAKE-TYPE | <u>SEC M44N 79</u> |
| | | | | FEET | <u>21½</u> |
| | | | | HOURS | <u>20/20/20</u> |
| | | | | JETS | <u>JNC.</u> |
| | | BIT NO. | | SIZE | |
| FROM | <u>65</u> | FT. TO | <u>94</u> | FT. | <u>29</u> |
| | | | | IN | <u>14</u> |
| | | | | HRS. | <u>5</u> |
| | | | | WT. ON BIT | <u>1000#</u> |
| | | | | | RPM |
| | | | | | <u>100</u> |
| | | | | | SPEED |
| DRILLING SETUP <u>BIT, BIT SUB, 2 PC., STAB, X OVER</u> | | | | | |

| | | | | | | | | |
|-------------|------|-----------|-----------------|-------------|------------|------|-----------|-----|
| LAST CASING | AT | FORMATION | <u>Boulders</u> | PUMP PRESS. | <u>500</u> | PSID | <u>60</u> | SPM |
| | SIZE | DEPTH | | | | | | |

| | | | | | | | |
|-------------|-----|--------------|--|-----------------|-------------|--|---------|
| PUMP OUTPUT | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT/SEC. |
|-------------|-----|--------------|--|-----------------|-------------|--|---------|

| | | | | | | | | | |
|-------------|---------------|---------|------------|------|------------|-----|-----------|------|-----|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>Gel</u> | TYPE | <u>8.6</u> | PCF | <u>75</u> | SEC. | CPS |
|-------------|---------------|---------|------------|------|------------|-----|-----------|------|-----|

| | | | | | | | | | |
|-----------|---------------|------------|----|------------------|----|-------------|------------|---|---|
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | FILTER CAKE | <u>132</u> | % | % |
|-----------|---------------|------------|----|------------------|----|-------------|------------|---|---|

| | | | | | | | | | |
|----------|-----|-----|---|----|-----|----|-----|---------------|---------------|
| CHLORIDE | PPM | OIL | % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |
|----------|-----|-----|---|----|-----|----|-----|---------------|---------------|

| | | | | | | | | | |
|---------|--|--|--|--|--|--|--|--|--|
| SURVEYS | | | | | | | | | |
|---------|--|--|--|--|--|--|--|--|--|

DETAIL DYNA DRILLED. 17½" HOLE FROM 65'-80'. BOULDERS FALLING IN. POH. 4D DYNA. RIH. DRILLED. 17½" FROM 80-94'. REPAIRING PUMP @ 6AM.

| | |
|------------------------|-------------|
| CUMULATIVE MUD COST | <u>1110</u> |
|------------------------|-------------|

| | |
|--------------------------|----------------|
| CUMULATIVE DAILY COST | <u>108,292</u> |
|--------------------------|----------------|

| | |
|-------------------------|----------------|
| DRILLING REPRESENTATIVE | <u>SAS/RJA</u> |
|-------------------------|----------------|

| | |
|---------------|---------------------|
| RIG PHONE NO. | <u>702-635-5556</u> |
|---------------|---------------------|

DAILY PROGRESS OF DRILLING WELLS 10-562

DRILLING DAYS 4 CUM. ROTATING HRS. 48

2-26 19 80

FIL NO. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | |
|---|-------------------|-------------------|-------------------|----------|-------|---------------|-----------------|
| DEPTH <u>106</u> | BIT NO. <u>2</u> | SIZE <u>17½"</u> | SEC <u>H44N</u> | 91 | 32 | <u>202020</u> | JET <u>IAC.</u> |
| | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. <u>3</u> | SIZE <u>26"</u> | SEC. <u>H.O.</u> | 30 | 3 | <u>161616</u> | <u>IAC.</u> |
| FROM <u>94</u> | FT. TO <u>106</u> | FT. <u>12</u> FT. | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | | | | | | |
| | | | IN <u>1½</u> HRS. | <u>6</u> | 1000# | <u>100</u> | RPM |
| | | | WT. ON BIT | | | | |
| DRILLING SETUP <u>BIT, H.O., XOVER, KELLY</u> | | | | | | | |

| | | | | | | | | |
|---------------|---------------|---------------|-----------------------------------|------------------|---------------|--------------|-----------|--------|
| LAST CASING | AT | FORMATION | <u>Boulders</u> ^{*SHALE} | PUMP PRESS. | <u>300</u> | PSIG | <u>60</u> | SPM |
| | SIZE | DEPTH | | | | | | |
| PUMP OUTPUT | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. | |
| DRLG. FLUID | <u>BAROID</u> | <u>GEL</u> | <u>8.7</u> | PCF | <u>56</u> | SEC. | <u>40</u> | CPS |
| MUD CO. | | TYPE | WEIGHT | | FUNNEL VISC. | | | |
| YIELD PT. | <u>20</u> | #/100 SQ. FT. | CC | HT+HP WATER LOSS | CC | <u>3 1/2</u> | <u>5</u> | % |
| CHLORIDE | <u>500</u> | PPM | % | WATER LOSS | FILTER CAKE | SOLIDS | <u>1</u> | SAND % |
| OIL | CA | PPM | pH | ALK | GALS (% MIN.) | | | |
| OTHER REMARKS | | | | | | | | |

SURVEYS

DETAIL DRLD. 17½" HOLE FROM 94-106. CIRC.+ COND MUD PON.
M/U 26" H.O. OPEN 17½" HOLE TO 26" FROM 15'-45' @ 6MM.

| | | | | | |
|---------------------|-------------|-----------------------|----------------|-------------------------|---------------------|
| CUMULATIVE MUD COST | <u>1535</u> | CUMULATIVE DAILY COST | <u>121,924</u> | DRILLING REPRESENTATIVE | <u>SAS / RJA</u> |
| | | | | RIG PHONE NO. | <u>702-635-5556</u> |

DAILY PROGRESS OF DRILLING WELLS 10-562

DRILLING DAYS 5 CUM. ROTATING HRS. 28

2-27 1980

WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI # 7
 DEPTH 106 BIT NO. 1 H.O. 26" SEC. ROCK 91 FEET 13 HOURS 2000 JETS 20 INC. CONDITION
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM _____ FT. TO _____ FT. IN _____ HRS. 1000# _____ WT. ON BIT _____ RPM _____ SPEED _____
 DRILLING SETUP 17½" BIT, H.O., X OVER, D.C.

LAST CASING 10 AT DEPTH FORMATION SANDY Rock PUMP PRESS. 100 PSIG 52 SPM
 PUMP OUTPUT 327 GPM ANNULAR VEL. 30 FT./MIN. (D.P.) NOZZLE VEL. _____ FT/SEC.
 DRLG. FLUID BAROID MUD CO. GEL TYPE 9.0 WEIGHT PCF 82 FUNNEL VISC. SEC. 42 PLASTIC VISC. CPS
21 #/100 SQ. FT. 8 CC WATER LOSS HT-HP WATER LOSS 3 FILTER CAKE 5 SOLIDS 1½ % SAND
500 PPM 0 % TR OIL CA PPM 9.0 pH .2/.3 ALK GALS (% MIN.) OTHER REMARKS
 CHLORIDE

SURVEYS _____

MAIL OPEN 17½" HOLE TO 26" FROM 45'-106' CIRC. HOLE CLEAN @ 6AM.

CUMULATIVE MUD COST 1710 CUMULATIVE DAILY COST 134,191 DRILLING REPRESENTATIVE BR/RJA
 RIG PHONE NO. 702-635-5556

DAILY PROGRESS OF DRILLING WELLS - 562

DRILLING DAYS 6 CUM. ROTATING HRS. 48

FEB 28 1980

WELL NO. DOE 85-18 FIELD BEAUVILLE CONTRACTOR KENAI #7

| | | | | | | | | | | |
|----------------|---------------------------------|---------|----------------|----------------|-----------|------------------|----------|-------|---------------|-----------|
| DEPTH | <u>110</u> | BIT NO. | <u>#2 H.O.</u> | <u>26" RR.</u> | SIZE | <u>SEC. Rock</u> | <u>4</u> | 2 | <u>20R20</u> | INC. |
| | | | | | MAKE-TYPE | FEET | HOURS | JETS | CONDITION | |
| | | BIT NO. | <u>#3 R.R.</u> | <u>17½"</u> | SIZE | <u>SEC. M44N</u> | <u>4</u> | 2 | <u>16VGN6</u> | INC. |
| FROM | <u>106</u> | FT. TO | <u>110</u> | FT. | <u>4</u> | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | | | | | | | | | |
| | | | | | | | | | | |
| DRILLING SETUP | <u>17½" BIT, 26" H.O., D.C.</u> | | | | | | | | | |

LAST CASING 100 PSIG 52 SPM
SIZE AT DEPTH FORMATION SAND + Rock PUMP PRESS.

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | | |
|-------------|---------------|---------------|-------------|--------|------------|------------------|--------------|-------------|-----------|------|----------------------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEC</u> | TYPE | <u>9.0</u> | WEIGHT | <u>65</u> | PCF | <u>38</u> | SEC. | <u>PLASTIC VISC.</u> | CPS |
| | | | | | | | | | | | | |
| YIELD PT. | <u>19</u> | #/100 SQ. FT. | <u>9</u> | CC | | | <u>3 1/2</u> | CC | <u>4</u> | * | <u>1/4</u> | % |
| | | | | | WATER LOSS | HT-HP WATER LOSS | | FILTER CAKE | SOLIDS | | | |
| CHLORIDE | <u>400</u> | PPM OIL | <u>% CA</u> | PPM pH | <u>9.0</u> | <u>.2/.4</u> | | | | | | |
| | | | | | | | | | | | | |
| SURVEYS | OTHER REMARKS | | | | | | | | | | | |

TAIL CIRC. + COND. HOLE FOR CONDUCTOR. POH. RAN 20" COND. STOPPED @ 60'. POH w/ CSG. PLUG BIT, H.O. & RIH. REAMED FROM 17'-106'. DRLD. 106'-110'. CIRC. + COND. HOLE @ 6MM.

CUMULATIVE
MUD COST

1944.

CUMULATIVE
DAILY COST

141,786

DRILLING REPRESENTATIVE

B.R. / RJA

RIG PHONE NO.

702-635-5556

DAILY PROGRESS OF DRILLING WELLS 562

DRILLING DAYS 7 CUM. ROTATING HRS. 482-291080WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENA / #7

| | | | | | | | | | |
|-------|------------|---------|--|------|-----------|------|-------|-------|-----------|
| DEPTH | <u>110</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 20" AT 60' FORMATION SANDY ROCK PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------------|------------|------------------|-------------|-----|---------------|--------------|---------------|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>9.0</u> | WEIGHT | <u>65</u> | PCF | <u>38</u> | SEC. | CPS |
| YIELD PT. | <u>19</u> | #/100 SQ. FT. | <u>9</u> | WATER LOSS | CC | HT+HP WATER LOSS | <u>3</u> | CC | <u>1/4</u> | FUNNEL VISC. | SOLID |
| CHLORIDE | <u>400</u> | PPM | <u>TR</u> | OIL | PPM | pH | <u>12.4</u> | ALK | GALS (% MIN.) | % SAND | OTHER REMARKS |

SURVEYS _____

DETAIL CIRC. + COND. HOLE FOR CONDUCTOR. POH. RAN 20" COND. TO 60', STOPPED. USGS APPROVED 60' CMT'ING DEPTH. BJ CMT'D COND. W/ 200C/F CLASS "G" CMT. W/ 3% CaCl_2 THROUGH 1" TUBING IN ANNULUS, SET @ 50'. CIP @ 3:30 P.M. 2-28-80. W.O.C. LANDED 20" COND. WELD ON HEAD. WELDING ON DIVERTER LINE @ 6AM.

CUMULATIVE MUD COST 1944CUMULATIVE DAILY COST 164,527DRILLING REPRESENTATIVE BR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS 6-562

DRILLING DAYS 8 CUM. ROTATING HRS. 483-1 1980WELL NO. 85-1B Beowawe FIELD Beowawe CONTRACTOR Kenai 7

| | | | | | | | |
|-------------------|--------------|------|-----------|-------------------|------------|----------------|-----------|
| DEPTH <u>110'</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS <u>11</u> | CONDITION |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS <u>11</u> | CONDITION |
| FROM _____ | FT. TO _____ | FT. | IN _____ | HRS. <u>1000#</u> | WT. ON BIT | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 20 AT 60' FORMATION _____ PUMP PRESS. _____ PSID _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | |
|---|------------------------|-------------------|-----------------|-----------------------------|-------------------|--------------------------------|
| DRLG. FLUID <u>Bentonite</u> MUD CO. | <u>Gel</u> TYPE | <u>9.0</u> WEIGHT | PCF <u>65</u> | FUNNEL VISC. <u>3.32</u> | SEC. <u>38</u> | CPS PLASTIC VISC. <u>1/4</u> % |
| <u>19</u> #/100 SQ. FT. | <u>9</u> CC WATER LOSS | HT-HP WATER LOSS | CC <u>4</u> | FILTER CAKE <u>4</u> SOLIDS | SAND <u>1/4</u> % | |
| <u>400</u> PPM CHLORIDE | <u>1</u> OIL % | <u>9</u> pH | <u>.2/4</u> ALK | GALS (% MIN.) | OTHER REMARKS | |

SURVEYS _____

DETAIL Work on picture nipple and flowline nipple up 20 hyd drill/unload
Casing. Make up 17 1/2" bit at 6:AMCUMULATIVE MUD COST 1944 CUMULATIVE DAILY COST 178893 DRILLING REPRESENTATIVE _____RIG PHONE NO. 702 635 5556

D. BY PROGRESS OF DRILLING WELLS 6-562

DRILLING DAYS 9 CUM. ROTATING HRS. 1980

3-2 1980

WELL NO. 85-18 FIELD Browawee CONTRACTOR Kenai 7
 DEPTH 131 BIT NO. 4 SIZE 17 1/2 MAKE-TYPE Sec. 54TJ FEET 3 HOURS 3 JETS 16 1/2 CONDITION 2-2-I
 BIT NO. SIZE MAKE-TYPE FEET HOURS 1 1 JETS CONDITION
 FROM 110' FT. TO 131 FT. 21 FT. IN 3/4 HRS. 10 WT. ON BIT 1000# SPEED 50 RPM
 DRILLING SETUP 17 1/2 bit, drill collars

LAST CASING 20 AT 60' FORMATION PUMP PRESS. 600 PSID 51 SPM

PUMP OUTPUT 340 GPM ANNULAR VEL. 30 FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

| | | | | | |
|------------------------|--------------------|-----------------|-----------------------------|--|-------------------------------------|
| DRLG. FLUID <u>Bgr</u> | MUD CO. <u>Gel</u> | TYPE <u>9.0</u> | WEIGHT <u>PCF</u> <u>68</u> | FUNNEL VISC. <u>SEC.</u> <u>5</u> | PLASTIC VISC. <u>CPS</u> <u>1/2</u> |
| <u>30</u> | #/100 SQ. FT. | <u>5</u> | CC <u>7.5</u> | HT-HP WATER LOSS <u>CC</u> <u>2/32</u> | SOLIDS <u>%</u> <u>5</u> |
| <u>400</u> | PPM OIL | <u>80</u> CA | pH <u>10</u> | WATER LOSS <u>ALK</u> <u>1/1.5</u> | SAND <u>%</u> <u>1/2</u> |
| OTHER REMARKS | | | | | |

SURVEYS

DETAIL R.I.H. with 17 1/2 bit tag top of cement at 51' drill out cement to 110' drill to 131' and circulate P.O.H. Pick up 6 point and 3 point reamer and monel. R.I.H. at 6A14

CUMULATIVE MUD COST 2542

CUMULATIVE DAILY COST 192.980

DRILLING REPRESENTATIVE BR.R/CF

RIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS - 562

DRILLING DAYS 10 CUM. ROTATING HRS. 65 3/4 3-3-1981

WELL NO. B5-18 FIELD Beaufort CONTRACTOR Kenai 7

| | | | | | | | | |
|---|------------------------|--------------------------------|-------------------------------|---------------------------------|--------------------|----------------------|------------------|-----------|
| DEPTH <u>248</u> | BIT NO. <u>5</u> | SIZE <u>17 1/2"</u> | MAKE-TYPE <u>Sec 5-80</u> | FEET <u>117'</u> | HOURS <u>17</u> | JETS <u>15/15/15</u> | IC. <u>1C.</u> | CONDITION |
| BIT NO. <u>131</u> | | SIZE <u>117</u> | MAKE-TYPE <u>IN 17</u> | FEET <u>20</u> | HOURS <u>1000#</u> | JETS <u>50</u> | SPEED <u>SPM</u> | CONDITION |
| FROM <u>131</u> FT. TO <u>248</u> FT. IN <u>17</u> HRS. WT. ON BIT <u>20</u> RPM <u>1000#</u> | | | | | | | | |
| DRILLING SETUP <u>17 1/2" bit, 6 point reamer, float sub, monel, 3 point reamer, drill collars, stabilizer, 3-D.C., Stab,</u> | | | | | | | | |
| LAST CASING <u>20</u> SIZE | AT <u>60'</u> DEPTH | FORMATION <u>Rock</u> | PUMP PRESS. <u>650</u> PSI | <u>52</u> SPM | | | | |
| PUMP OUTPUT <u>336</u> GPM | ANNULAR VEL. <u>30</u> | FT./MIN. (D.P.) | NOZZLE VEL. <u> </u> | FT./SEC. <u> </u> | | | | |
| DRLG. FLUID <u>Gel</u> MUD CO. | TYPE <u>9.0</u> | WEIGHT <u>PCF</u> | <u>63</u> FUNNEL VISC. | <u>16</u> SEC. PLASTIC VISC. | CPS | | | |
| YIELD PT. <u>6</u> #/100 SQ. FT. | WATER LOSS <u>8</u> CC | HT-HP WATER LOSS <u>212</u> CC | <u>5</u> FILTER CAKE | <u>1/2</u> SOLIDS | % SAND % | | | |
| CHLORIDE <u>400</u> PPM | OIL <u>80</u> % | CA <u>10.5</u> PH | ALK <u>1.2/1.8</u> | GALS (% MIN.) <u> </u> | OTHER REMARKS | | | |
| SURVEYS <u>120' 1°45' S75W</u> | | | | | | | | |

TAIL R.L.H. to 131' drill ahead to 180 circulate survey, drilling ahead at 6:AM depth 248'

CUMULATIVE
MUD COST 3009CUMULATIVE
DAILY COST 230,898DRILLING REPRESENTATIVE B.R.R./CFRIG PHONE NO. 702 635/5556

D. PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 11 CUM. ROTATING HRS. 853-410 80WL NO. DOE 85-18FIELD BEAUVILLECONTRACTOR KENAI # 7

| | | | | | | | | | | | | | |
|-------|------------|---------|----------------|--------|------------------------------------|--|------------------|------------|-------|-----------|-----------|------|-----------|
| DEPTH | <u>343</u> | BIT NO. | <u>5</u> | SIZE | <u>17$\frac{1}{2}$"</u> | MAKE-TYPE | <u>SEC. S80A</u> | FEET | | HOURS | <u>11</u> | JETS | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | <u>11</u> | JETS | CONDITION |
| FROM | <u>248</u> | FT. TO | <u>343</u> FT. | 95 FT. | IN | <u>19$\frac{1}{2}$</u> HRS. | <u>15</u> | WT. ON BIT | 1000# | <u>50</u> | SPEED | RPM | |

DRILLING SETUP 17 $\frac{1}{2}$ " BIT, 6 PT. REAMER, FLOAT SUB, MONEL, 3 PT REAMER, AC., STAB,
3 DC, STAB, 3 DC, STAB

LAST CASING 20" AT 60' FORMATION Rock PUMP PRESS. 500 PSIG 52 RPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | |
|-------------|--------------------------|---------------|----------------|---------------|------------------|---------------|--------------|------------|--------------|
| DRLG. FLUID | <u>BAROID</u> MUD CO. | GEL TYPE | <u>9.0</u> | PCF | <u>65</u> | SEC. | <u>20</u> | CPS | |
| YIELD PT. | <u>8</u> #/100 SQ. FT. | <u>9.5</u> CC | | WATER LOSS | HT-HP WATER LOSS | CC | <u>3 1/2</u> | <u>5</u> % | <u>1/4</u> % |
| CHLORIDE | <u>400</u> PPM | <u>800</u> % | <u>9.5</u> PPM | <u>9.5</u> PH | <u>1/2</u> ALK | GALS (% MIN.) | | | |
| SURVEYS | <u>241'</u> | <u>1°30'</u> | <u>OIL</u> | <u>CA</u> | <u>284' 2°</u> | <u>ST77W</u> | | | |

OTHER REMARKS

FAIL DRLD. 248'-253'. RIG DOWN 3 HRS. FOR REPAIRS ON KELLY.

DRLD. AHEAD TO 314'. CIRC + SURVEY. DRLG AHEAD @ 343' @
6AM.

CUMULATIVE MUD COST 3470

CUMULATIVE DAILY COST 242,068

DRILLING REPRESENTATIVE BR/RJA

RIG PHONE NO. 702-635-5556

D(X) PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 12 CUM. ROTATING HRS. 943-5 19 80WELL NO. 85-18 D.D.E. FIELD BEDWAWE CONTRACTOR KENAI 7

| | | | | | | | |
|------------------|------------------|--|-----------------|-----------------|--|----------------------|-------------|
| DEPTH <u>400</u> | BIT NO. <u>5</u> | SIZE <u>17$\frac{1}{2}$</u> | SEC. <u>S88</u> | FEET <u>240</u> | HOURS <u>4$\frac{3}{4}$</u> | JETS <u>15/15/15</u> | 4-4-T |
| | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. <u>6</u> | <u>17$\frac{1}{2}$</u> | <u>SFC S84</u> | <u>29</u> | <u>2$\frac{1}{2}$</u> | <u>11</u> | <u>T.C.</u> |
| FROM <u>343</u> | FT. TO <u>40</u> | FT. <u>57</u> | IN <u>9</u> | HRS. <u>25</u> | 1000# <u>50</u> | SPEED | RPM |

DRILLING SETUP BIT, 6 POINT REAMER, FLOAT SUB, SHOCK SUB, MUDFL, 3 POINT REAMER, 1-D.C., STAB, 3-D.C., STAB, 3-D.C., STAB.

| | | | | | | |
|-----------------------|---------------|-----------------------|------------------------|-----|-----------|-----|
| LAST CASING <u>20</u> | AT <u>100</u> | FORMATION <u>ROCK</u> | PUMP PRESS. <u>100</u> | PSI | <u>53</u> | SPM |
| SIZE | DEPTH | | | | | |

| | | | | | |
|-------------|-----|--------------|-----------------|-------------|----------|
| PUMP OUTPUT | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. |
|-------------|-----|--------------|-----------------|-------------|----------|

| | | | | | | | |
|---------------------------|--------------------------|-----------------|---------------------|---------------------------|-----------------|--------------|---|
| DRLG. FLUID <u>BAROID</u> | MUD CO. <u></u> | TYPE <u>GEL</u> | WEIGHT <u>9.0</u> | PCF <u>59</u> | SEC. <u>30</u> | CPS | |
| YIELD PT. <u>11</u> | #/100 SQ. FT. <u>9.0</u> | CC | HT-HP WATER LOSS CC | FUNNEL VISC. <u>2 1/2</u> | SOLIDS <u>5</u> | % <u>1/4</u> | % |
| CHLORIDE <u>400</u> | PPM | % <u>80</u> | PPM <u>9.5</u> | FILTER CAKE | SAND | | |
| OIL <u>CA</u> | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | | |

SURVEYS 354° 1° 15' S84W

DETAIL DRILL 17 $\frac{1}{2}$ " HOLE 343' TD 365' (RIG DOWN FOR REPAIRS ON STAND PIPE)

DRILL FROM 365' TD 371' (RIG DOWN FOR REPAIRS TO DRAW WORKS ENGINE)

P.D.H. WITH BIT #5. CHANGE BITS RLH TO 371'; DRILL FROM 371' TO 400' DRILLING AHEAD AT 6:AM

NOTE:

RIG DOWN A HRS FOR REPAIRS.

CUMULATIVE
MUD COST4020CUMULATIVE
DAILY COST261,828DRILLING REPRESENTATIVE B.P.P. /CF

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELLS NO. 562

DRILLING DAYS 13 CUM. ROTATING HRS. 105 3/4 3-6 19 80

| | | | | | | | | | | | | | | |
|----------------|--|---------------|------------|----------------|---------------|------------------|----------------|---------------|--------------|----------|---------------|-----------|--------------|--------------|
| ✓ NO. | D.O.E. | <u>85-18</u> | FIELD | <u>Beowawe</u> | CONTRACTOR | <u>Kenai #7</u> | | | | | | | | |
| DEPTH | <u>653</u> | BIT NO. | <u>6</u> | SIZE | <u>17 1/2</u> | MAKE-TYPE | <u>SAC-584</u> | FEET | <u>282</u> | HOURS | <u>14 1/4</u> | JETS | <u>11</u> | IC CONDITION |
| BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | <u>11</u> | CONDITION | | |
| FROM | <u>400</u> | FT. TO | <u>653</u> | FT. | <u>253</u> | IN | <u>11 3/4</u> | HRS. | <u>25-35</u> | 1000# | <u>50</u> | SPEED | RPM | |
| WT. ON BIT | | | | | | | | | | | | | | |
| DRILLING SETUP | <u>17 1/2 bit, 6 Point reamer, float sub, Shock sub, manel, 3 point reamer, 1-D.C., Stab, 3-D.C., Stab, 3-D.C., Stab</u> | | | | | | | | | | | | | |
| LAST CASING | <u>20</u> | AT | <u>60</u> | FORMATION | <u>Rock</u> | PUMP PRESS. | <u>600</u> | PSIG | <u>52</u> | SPM | | | | |
| PUMP OUTPUT | <u>340</u> | GPM | | ANNULAR VEL. | <u>33</u> | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | | Gel | TYPE | WEIGHT | <u>9.2</u> | PCF | <u>70</u> | SEC. | <u>50</u> | CPS | | |
| YIELD PT. | <u>25</u> | #/100 SQ. FT. | | WATER LOSS | CC | HT-HP WATER LOSS | CC | FUNNEL VISC. | <u>3 1/2</u> | SOLIDS | <u>6</u> | % | <u>1/4</u> % | |
| CHLORIDE | <u>400</u> | PPM | % | <u>80</u> | PPM | pH | <u>9</u> | FILTER CAKE | | SAND | | | | |
| OIL | | CA | | | ALK | | | GALS (% MIN.) | | | | | | |
| OTHER REMARKS | | | | | | | | | | | | | | |
| SURVEYS | <u>468' 10 15' 5 16W</u> | | | | | | | | | | | | | |

DETAIL Drilled 17 1/2 hole from 400' to 468' problems with fill on each connection circulate out 15' of fill and survey. Drilled from 468 to 653' at 6 AM, drilling ahead.

CUMULATIVE MUD COST 4745CUMULATIVE DAILY COST 260,793DRILLING REPRESENTATIVE B.R.R./CF

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS P-562

DRILLING DAYS 14 CUM. ROTATING HRS. 123½ 3-7 19 80

✓ NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | | | | | | |
|---|----------------|---------------|------------|--------------|---------------|-----------------|-----------------|------------------|--------------|---------------|--------------|-------|-----------|---------------|
| DEPTH | <u>857</u> | BIT NO. | <u>6</u> | SIZE | <u>17½</u> | MAKE-TYPE | <u>SEC. F84</u> | FEET | <u>486</u> | HOURS | <u>32</u> | JETS | <u>11</u> | CONDITION |
| FROM | <u>653</u> | FT. TO | <u>857</u> | FT. | <u>204</u> | IN | <u>17½</u> | HRS. | <u>30</u> | WT. ON BIT | <u>1000#</u> | SPEED | <u>50</u> | RPM |
| DRILLING SETUP <u>17½" BIT, 6 PT REAMER, FLOAT SUB, SHOCK SUB, MONOC, 3 PT REAMER, DC, STAB, 3DC, STAB, 3DC, STAB, 3DC.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>20"</u> | AT | <u>60'</u> | FORMATION | <u>BASALT</u> | PUMP PRESS | <u>500</u> | PSIG | <u>52</u> | SPM | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | TYPE | <u>Gel</u> | WEIGHT | <u>9.2</u> | PCF | <u>80</u> | SEC. | <u>48</u> | CPS | | |
| | <u>24</u> | #/100 SQ. FT. | | WATER LOSS | <u>8.8</u> | CC | | HT+HP WATER LOSS | <u>3 1/2</u> | FUNNEL VISC. | <u>6</u> | % | <u>44</u> | % |
| | | | | | | | | | | SOLIDS | | | | |
| | <u>400</u> | PPM | | % | <u>80</u> | PPM | <u>9.5</u> | ALK | | GALS (% MIN.) | | | | |
| SURVEYS | <u>700</u> | OIL | | CA | | pH | | | | | | | | OTHER REMARKS |
| | <u>10' 15"</u> | | | | | | | | | | | | | |
| | <u>S 30W</u> | | | | | | | | | | | | | |

DETAIL DRLD. 17½" HOLE FROM 653'-770'. CIRC + SURVEYED. DRLD.770'-857' @ 6 AM. DRLG. AHEADCUMULATIVE
MUD COST5832CUMULATIVE
DAILY COST279, 874

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

702-635-5556

DAILY PROGRESS OF DRILLING WELLS 562

DRILLING DAYS 15 CUM. ROTATING HRS. 131^{3/4}

3-8

1980

| | | | | | | | | | | | | | | |
|--|---------------|---------|------------|--------------|-------------------|-----------------|------------------|-------------|--------|------------|-------------------|------|---------------|-----------|
| WELL NO. | DOE 85-18 | FIELD | BEOWAWE | CONTRACTOR | KENAI # 7 | | | | | | | | | |
| DEPTH | 1008 | BIT NO. | 6 | SIZE | 17 ^{1/2} | MAKE-TYPE | SEP. S84 | FEET | 637 | HOURS | 40 ^{1/4} | JETS | 161616 | CONDITION |
| FROM | 857 | FT. TO | 1008 | FT. | 151 | IN | 8 ^{1/4} | HRS. | 35 | WT. ON BIT | 1000# | JETS | 50 | RPM |
| DRILLING SETUP 17 ^{1/2} " BIT, 6 PT REAMER, FLOAT SUB, SHOCK SUB, NOVEL, 3 PT REAMER 1DC., STAB, 3DC, STAB, 3DC, STAB, 3DC | | | | | | | | | | | | | | |
| LAST CASING | 20" | AT | 60' | FORMATION | | PUMP PRESS. | | PSI@ | | SPM | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | BARDID | MUD CO. | | TYPE | GEL | WEIGHT | | PCF | | SEC. | | CPS | | |
| YIELD PT. | #/100 SQ. FT. | CC | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | FILTER CAKE | SOLIDS | % | SAND | % | | |
| CHLORIDE | PPM | % | CA | PPM | pH | ALK | GALS (% MIN.) | | | | | | OTHER REMARKS | |
| SURVEYS | | | | | | | | | | | | | | |

TAIL DRILL FROM 857' TO 1008'. CIRC + COND HOLE, WIPE TO COLLARS.
 CIRC. POH. RIG UP SCHLUMBERGER. RAN DIL, SONIC LOG, DIP METER.
 RIG DOWN LOGGERS @ 6AM.

CUMULATIVE
MUD COST

5974

CUMULATIVE
DAILY COST

297,030

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

702-635-5556

DAILY PROGRESS OF DRILLING WELLS 0-562

DRILLING DAYS 16 CUM. ROTATING HRS. 131 3/4 3-9 1980

WELL NO. DOE 85-18 FIELD BECKWEE CONTRACTOR KENAI #7
 DEPTH 1008 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM _____ FT. TO _____ FT. _____ FT. IN _____ HRS. 1000# _____ WT. ON BIT _____ SPEED _____ RPM _____

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM _____
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| DRLG. FLUID | MUD CO. | GEL | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
|-------------|---------|---------------|------------|------------------|-----|------------------|---------------|---------------|---------------|
| | | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | 1/32 FILTER CAKE | SOLIDS % | SAND % | % |
| | | YIELD PT. | WATER LOSS | | | | | | |
| | | CHLORIDE PPM | OIL % | CA PPM | pH | ALK | GALS (% MIN.) | | OTHER REMARKS |

SURVEYS _____

DETAIL RIH TO 1008'. CIRC FOR CSG. POH. RIG UP AND RAN 25 JTS
OF 13 3/8", 54.45#, K-55, BUTT GSG. BJ HUGHES CUTTED AS
FOLLOWS: 100 C/F WATER AHEAD LEAD MIX 1200 C/F 1:1 POZz
CLASS "G" W/ 33#/SACK OF SILICA FLOUR TAIL MIX 200 C/F
OF CLASS "G" W/ 33#/SACK SILICA FLOUR. DISP. W/ 855 C/F
OF MUD. 250 C/F RETURNS TO SURFACE. BUMPED PLUG
FLOAT HELD. C.I.P. @ 4AM 3-9-80. WOC @ 6AM.

| | | | | | |
|------------------------|-------------|--------------------------|----------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>5974</u> | CUMULATIVE DAILY COST | <u>364,704</u> | DRILLING REPRESENTATIVE | <u>BR/RJA</u> |
| | | | | RIG PHONE NO. | |

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 17 CUM. ROTATING HRS. 131³/₄ 3-10 19 80

L NO. DOE 85-18 FIELD BEDAWEE CONTRACTOR KENAI #7
 DEPTH 1008 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM _____ FT. TO _____ FT. FT. IN _____ HRS. 1000# _____ WT. ON BIT _____ SPEED _____ RPM _____

DRILLING SETUP _____

LAST CASING 13³/₈ AT 1006 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM _____
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PFC | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
|-------------|---------------|------------|------------|------------------|--------|-----|---------------|---------------|---------------|-----|
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | OIL | % | CA | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | |

SURVEYS _____

DETAIL W.O.C. TAKE OUT 20" HYDRILL . CUT OFF 20" CONDUCTOR .
LAND 13³/₈" CASING AND WELD ON HEAD INSTALLED 12" GATE
VALVE . NIPPLE UP BOPE @ GRM .

CUMULATIVE MUD COST 5974 CUMULATIVE DAILY COST 373,274 DRILLING REPRESENTATIVE BR/RTA
 RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS 562

DRILLING DAYS 18 CUM. ROTATING HRS. 13 3/4 3-11 19 80

NO. D.D.E. 85-18 FIELD Beowawe CONTRACTOR Kenai 7

| | | | | | | | | | |
|-------|------|---------|--|------|-----------|------|------------|------|-----------|
| DEPTH | 1008 | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | | |

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI @ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | |
|-------------|---------------|------------|------|------------------|---------------|--------|---------------|
| DRLG. FLUID | Baroid | MUD CO. | TYPE | WEIGHT | PCF | SEC. | CPS |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | 1/32 | % |
| CHLORIDE | PPM | OIL % | PPM | pH | ALK | SOLIDS | SAND % |
| | | CA | | | GALS (% MIN.) | | OTHER REMARKS |

SURVEYS _____

DETAIL Continue to nipple up B.O.E. install accumulator lines,
testing Class III B.O.P.E. at 6 AM.CUMULATIVE MUD COST 5974CUMULATIVE DAILY COST 396,648DRILLING REPRESENTATIVE B.R.R./CFRIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 19 CUM. ROTATING HRS. 143 1/43-1219 80

WELL NO. DOE BS-18 FIELD BEOWAWE CONTRACTOR KENAI # 7
 DEPTH 1120' BIT NO. 1(RR) SIZE 12 1/4 SEC M4N 165 FEET 11 1/2 HOURS 15 1/2 JETS 15 1/2 INC. CONDITION
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 954 FT. TO 1120 FT. 165 IN 11 1/2 HRS. 20 1000# 100 SPEED
 DRILLING SETUP BIT, SHOCK SUB, MONEL, 10-7 3/4" D.C.

LAST CASING 13 3/8 AT 1006 FORMATION BASALT PUMP PRESS. 600 PSI@ 52 SPM
 SIZE DEPTH _____
 PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.
 DRLG. FLUID BAROID GEL 9.1 PCF 60 SEC. 22 CPS
 MUD CO. TYPE WEIGHT FUNNEL VISC. PLASTIC VISC.
10 #/100 SQ. FT. 60 CC 3 1/2 FILTER CAKE 4 % SAND%
 YIELD PT. WATER LOSS HT-HP WATER LOSS SOLIDS OTHER REMARKS
200 PPM 20 PPM 10.5 ALK GALS (% MIN.)
 CHLORIDE OIL CA pH
 SURVEYS _____

MAIL TEST CLASS 3 BLIND RAMS + SURFACE FACILITIES @ 1000 PSI.
RIH TO 900'. CIRC. + COND. MUD. TEST PIPE RAMS + HYDRIL
TO 1000 PSI. APPROVED BY USGS. RIH + TAGGED PLUG @ 954'.
DRLD. OUT BAFFLE & CMT. TO SHOE @ 1006'. DRLD. 12 1/4" HOLE
TO 1120'. POW @ 6AM TO P/I U LOCKED IN DRLG. ASSY.

CUMULATIVE MUD COST 6830 CUMULATIVE DAILY COST 406,365 DRILLING REPRESENTATIVE SAS/RJA
 RIG PHONE NO. 702-635-5556

OILY PROGRESS OF DRILLING WELL. No-562

DRILLING DAYS 20 CUM. ROTATING HRS. 1563-13

1980

WELL NO. DOE 85-18FIELD BEOWAWE

CONTRACTOR

KENAI #7DEPTH 1240 BIT NO. 7 SIZE 12 1/4 MAKE-TYPE SMITH M44N FEET 120' HOURS 9 JETS 15/15/15 INC. CONDITION ZINC.BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
FROM 1120 FT. TO 1240 FT. 120 FT. IN 9 HRS. 20 1000# WT. ON BIT 80 SPEED RPMDRILLING SETUP BIT, 3PT REAMER, LEAD COLLAR, STAB, SHOCK SUB, MORSE, STAB,
1DC, STAB, 9-7 3/4" D.C.LAST CASING 13 3/8 AT 1006 FORMATION BASALT PUMP PRESS. 800 PSI@ 52 SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 9.1 PCF 45 SEC. 17 CPSYIELD PT. 8 #/100 SQ. FT. 10 WATER LOSS CC HT-HP WATER LOSS CC FILTER CAKE 3 1/2 SOLIDS 4 % SAND TR %CHLORIDE 200 PPM 20 OIL CA pH ALK GALS (% MIN.)SURVEYS 1088' 1°15' S 15W 1226' 10' S 33W OTHER REMARKSALL POH. CHANGED BITS + BHA. RIH TO 1006: CIRC. + COND.
MUD. REAMED FROM 1007' TO 1120'. DRLG. 12 1/4" HOLE
FI 1120'- 1239. LOST CIRC. (10 BBLs). POH TO SHOE. TEST
BDPS. REGAINED CIRC. RIH. DRLG. @ 6 AM DEPTH 1240'.

MUD IN 109° MUD OUT 119.

MULATIVE
MUD COST7368CUMULATIVE
DAILY COST416,559.

DRILLING REPRESENTATIVE

SAS/RJA

RIG PHONE NO.

702-635-5556

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 21 CUM. ROTATING HRS. 171³/4 3-14 1980

NO. DDE 85-18 FIELD BEOWAUE CONTRACTOR KENAI #7

| DEPTH | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
|---|--------------------------|--|--|-------------------|------------------------------------|-----------|----------------|
| <u>1450</u> | <u>7</u> | <u>12¹/₄</u> | <u>SEC M44N</u> | <u>330</u> | <u>24¹/₂</u> | <u>55</u> | <u>T-Y B-3</u> |
| | <u>8</u> | <u>12¹/₄</u> | <u>SEC. S8</u> | | | | |
| FROM <u>1240</u> | FT. TO <u>1450</u> FT. | <u>210</u> FT. | IN <u>15¹/₂</u> HRS. | <u>20</u> | <u>1000#</u> | <u>80</u> | RPM |
| WT. ON BIT | | | | | | | |
| DRILLING SETUP <u>BIT, 3PT REAMER, LEAD COLLAR, STAB, SHOCK SUB, MOWEL, STAB,</u> | | | | | | | |
| <u>1DC, STAB, 3DC, STAB, 3DC, STAB, 3DC, STAB</u> | | | | | | | |
| LAST CASING <u>13³/₈</u> AT <u>1006</u> SIZE | FORMATION <u>BASALT</u> | PUMP PRESS. <u>1000</u> PSI@ <u>52</u> SPM | | | | | |
| PUMP OUTPUT <u>320</u> GPM | ANNULAR VEL. <u>55</u> | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. | | | |
| DRLG. FLUID <u>BAROID</u> MUD CO. | TYPE <u>GEL</u> | WEIGHT <u>9.1</u> PCF | FUNNEL VISC. <u>45</u> | SEC. <u>12</u> | CPS | | |
| YIELD PT. <u>6</u> #/100 SQ. FT. | WATER LOSS <u>7.6</u> CC | HT+HP WATER LOSS <u>21.5</u> CC | FILTER CAKE <u>2 1/2</u> | SOLIDS <u>3</u> % | TR. % | | |
| CHLORIDE <u>700</u> PPM | OIL <u>0</u> % | CA <u>20</u> PPM | pH <u>10.0</u> | GALS (% MIN.) | OTHER REMARKS | | |
| SURVEYS <u>1339'</u> | <u>0°</u> | | | | | | |

A.I.L. DRILLED 12¹/₄" HOLE F1 1240'-1450'. P.D.H. CHANGED BITS +
BHA. RIH @ 6 AM.

MUD IN 134° OUT 144°

CUMULATIVE MUD COST 8,444 CUMULATIVE DAILY COST 429,945 DRILLING REPRESENTATIVE SAS/RJA
RIG PHONE NO. 702-635-5556

ONLY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 22 CUM. ROTATING HRS. 19 1/2

3-15

1980

| | | | | | | | | | | | | |
|----------------------------|------------------|---------|----------------|------------|-----------------|-----------|---------------|-------|---------------|-------|---------------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | |
| DEPTH | <u>1671</u> | BIT NO. | <u>8</u> | SIZE | <u>12 1/4</u> | SEC. S&T | <u>221</u> | FEET | <u>19 3/4</u> | JETS | <u>151@15</u> | INC. |
| | | | | | | MAKE-TYPE | | HOURS | | | | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | JETS | | CONDITION |
| FROM | <u>1450</u> | FT. TO | <u>1671</u> | FT. | <u>221</u> | IN | <u>19 3/4</u> | FTS. | <u>20</u> | 1000# | <u>55</u> | RPM |
| WT. ON BIT | | | | | | | | | | | | |
| DRILLING SETUP <u>SAME</u> | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|-------------|---------------|-----------------|-------------|--------------|--------------------|------------------|-------------|---------------|-----------|----------|-----------|---------------|
| LAST CASING | <u>13 7/8</u> | AT | <u>1006</u> | FORMATION | <u>WELDED TUFF</u> | PUMP PRESS. | <u>800</u> | PSI@ | <u>52</u> | SPM | | |
| SIZE | | DEPTH | | | | | | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | TYPE | <u>GEL</u> | WEIGHT | <u>9.1</u> | PCF | <u>45</u> | SEC. | <u>16</u> | CPS |
| | | | | | | FUNNEL VISC. | | | | | | |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | <u>7</u> | CC | <u>18</u> | HT-HP WATER LOSS | CC | <u>2 1/2</u> | <u>3</u> | % | <u>TR</u> | % |
| CHLORIDE | <u>200</u> | PPM | <u>0</u> | % | <u>20</u> | PPM | <u>10.0</u> | | | | | |
| OIL | | CA | | pH | | ALK | | GALS (% MIN.) | | | | |
| SURVEYS | <u>1457'</u> | <u>1° 55' W</u> | | | <u>1565</u> | <u>045' N</u> | <u>72 E</u> | | | | | OTHER REMARKS |

DETAIL RIH & BROKE CIRC. @ 1058'. RIH. DRILLED 12 1/4" HOLE F/
1450' - 1671' @ 64M.

MUD IN 135° MUD OUT 147°

| | | | | | |
|---------------------|-------------|-----------------------|------------------|-------------------------|----------------|
| CUMULATIVE MUD COST | <u>9458</u> | CUMULATIVE DAILY COST | <u>441, 990.</u> | DRILLING REPRESENTATIVE | <u>SAS/RJA</u> |
| | | | | RIG PHONE NO. | |

ONLY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 23 CUM. ROTATING HRS. 214½ 3-16 1980

NO. DOE 85-18 FIELD BEAUVILLE CONTRACTOR KENAI #7

| | | | | | | | |
|---|------------------|-------------------|--------------------------|-----------------|-------------------|--------------------|-----------------|
| DEPTH <u>1838</u> | BIT NO. <u>8</u> | SIZE <u>12½</u> | MAKE-TYPE <u>SEB 5-8</u> | FEET <u>388</u> | HOURS <u>42 ¾</u> | JETS <u>ASV515</u> | INC. |
| BIT NO. _____ | | SIZE _____ | MAKE-TYPE _____ | FEET _____ | HOURS _____ | JETS _____ | CONDITION _____ |
| FROM <u>1671</u> FT. TO <u>1838</u> FT. | <u>167</u> | IN <u>23</u> HRS. | <u>2.5</u> | WT. ON BIT | 1000# | <u>55</u> | RPM |

DRILLING SETUP SAME

| | | | | | | | | | | |
|---------------------------------|---------------|---------------|-----------------|---------------|-----------------------------|-------------|---------------|--------|-----------|--------|
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | <u>BASALT + WELDED TUFF</u> | PUMP PRESS. | <u>900</u> | PSI@ | <u>51</u> | SPM |
| SIZE | DEPTH | | | | | | | | | |
| PUMP OUTPUT | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. | | | | | |
| DRLG. FLUID | <u>Baroid</u> | TYPE | <u>Gel</u> | WEIGHT | <u>9.1</u> | PCF | <u>47</u> | SEC. | <u>15</u> | CPS |
| MUD CO. | | | | | | | | | | |
| YIELD PT. | <u>7</u> | #/100 SQ. FT. | <u>7</u> | CC | <u>15</u> | CC | <u>2 1/2</u> | SOLIDS | <u>3</u> | % SAND |
| CHLORIDE | <u>200</u> | PPM | <u>0</u> | % | <u>20</u> | PPM | <u>10.0</u> | | | |
| OIL | CA | pH | ALK | GALS (% MIN.) | | | OTHER REMARKS | | | |
| SURVEYS <u>1668' 0°45' N72E</u> | | | | | | | | | | |

TAIL DRILLED 12½" HOLE F/ 1671 - 1838 '@ 60 ft.MUD COOLER TURNED ON @ 8:15 PM. DEPTH 1765'.8:15 PM MUD IN 147° MUD OUT 162°6 AM MUD IN 85° MUD OUT 106°

| | | | | | |
|------------------------|--------------|--------------------------|-----------------|-------------------------|------------------|
| CUMULATIVE MUD COST | <u>11025</u> | CUMULATIVE DAILY COST | <u>457,781.</u> | DRILLING REPRESENTATIVE | <u>SAS / RJA</u> |
| RIG PHONE NO. _____ | | | | | |

OILY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 24 CUM. ROTATING HRS. 2153-171980

WELL NO. DOE 85-18 FIELD BEOWAUE CONTRACTOR KENAI # 7
 DEPTH 1842 BIT NO. 8 SIZE 12 1/4 SEC. 58 FEET 392 HOURS 43 1/2 JETS 1515.5 SINC. INC.
 CONDITION
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 1838 FT. TO 1842 FT. 4 IN 1/2 HRS. 25 WT. ON BIT 1000# SPEED 55 RPM
 DRILLING SETUP SAME

LAST CASING 13 3/8 AT 1006 FORMATION WELDED TUFF PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH
 PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.
 DRILL. FLUID BACOID TYPE GEL. PCF _____ SEC. _____ CPS
 MUD CO. WEIGHT FUNNEL VISC. PLASTIC VISC.
 #/100 SQ. FT. CC CC /32 % %
 YIELD PT. WATER LOSS HT-HP WATER LOSS FILTER CAKE SOLIDS SAND
 CHLORIDE PPM % PPM pH ALK GALS (% MIN.) OTHER REMARKS
 OIL CA

SURVEYS _____

AIR DRILLED 12 1/4" HOLE F/ 1838 - 1842. LOST CIRC. PULLED TO
 SHOE + MIX GEL PILL. RIH SPOT GEL PILL. PULLED TO
 SHOE MIX LCM. PUMPED 3 PITS OF LCM. SPOTTING # 3 PIT OF
 LCM @ 6AM. WILL TRY TO FILL HOLE FROM TOP W/ WATER IF
 CANNOT FILL WILL DRILL AHEAD BLIND.

CUMULATIVE
MUD COST13,643.CUMULATIVE
DAILY COST462,676.

DRILLING REPRESENTATIVE _____

RIG PHONE NO. _____

SAS/RJA

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 25 CUM. ROTATING HRS. 2233-18 19 80

WELL NO. DOE. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7
 DEPTH 2034 BIT NO. 8 SIZE 12 1/4 MAKE-TYPE S-8 FEET 584 HOURS 5 1/4 JETS 151515 INC. CONDITION
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 1842 FT. TO 2034 FT. 192 FT. IN 8 HRS. 25 1000# 55 SPEED RPM
 DRILLING SETUP Same

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. 250 PSI@ 52 SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | |
|--------------------------------------|--------------------|---------------------|-----------------|---------------|---------------|
| DRLG. FLUID <u>Baroid</u> MUD CO. | <u>Gel</u> TYPE | WEIGHT | PCF | SEC. | CPS |
| YIELD PT. #/100 SQ. FT. | WATER LOSS CC | HT+HP WATER LOSS CC | /32 FILTER CAKE | SOLIDS % | % SAND % |
| CHLORIDE PPM | OIL % | CA PPM | pH ALK | GALS (% MIN.) | OTHER REMARKS |

SURVEYS _____

'AII PULLED TO SHOE. MIX GEL PILL. THAWED OUT 4" PUMP
 SUCTION LINE. RIH TO 1842'. DRLD. 12 1/4" HOLE AHEAD BLIND
 W/ WATER. SPOT GEL PILL @ EACH CONNECTION. DRLG.
 AHEAD @ 2034 @ 6AM.

(1800 BBLS WATER PUMPED DOWN HOLE)

CUMULATIVE MUD COST

17,018

CUMULATIVE DAILY COST

484,445.

DRILLING REPRESENTATIVE

SAS/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 26 CUM. ROTATING HRS. 2333-19

1980

| | | | | | | | | | | | | | | | |
|---|---------------------|---------|----------------|--------------|------------------|---------------|---------------|------------------|-------------|------------|---------------|---------------|-----------------|-------------|-----------|
| NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | | | | | | |
| DEPTH | <u>2154</u> | BIT NO. | <u>8</u> | SIZE | <u>12 1/4"</u> | MAKE-TYPE | <u>SEC 58</u> | FEET | <u>704</u> | HOURS | <u>61 1/4</u> | JETS | <u>15/15/15</u> | T-2 B-7 JNG | CONDITION |
| FROM | <u>2034</u> | FT. TO | <u>2154</u> | FT. | <u>120</u> | IN | <u>10</u> | HRS. | <u>25</u> | WT. ON BIT | 1000# | <u>55</u> | SPEED | RPM | |
| DRILLING SETUP <u>BIT, 3PT REAMER, LEAD COLLAR, JTAB, SHOCK SUB, MODEL, STAB, D.C., STAB, 3DC, STAB, 3DC, STAB, 3DC, STAB, D.P.</u> | | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | | | | PUMP PRESS. | <u>200</u> | PSI@ | <u>48</u> | SPM | | | |
| PUMP OUTPUT | | | GPM | ANNULAR VEL. | | | | FT./MIN. (D.P.) | NOZZLE VEL. | | | | FT./SEC. | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | | | | PCF | | | | SEC. | CPS | | |
| YIELD PT. | #/100 SQ. FT. | | WATER LOSS | CC | | | | HT+HP WATER LOSS | CC | <u>132</u> | % | SOLIDS | % | | |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | | | | | | OTHER REMARKS | | | |
| SURVEYS | <u>1984' 0° 45'</u> | | <u>5.35W</u> | | | | | | | | | | | | |

ALL DRILLED 12 1/4" HOLE F/ 2034'-2154'. DRILLING BLIND w/
WATER. SWEEPING HOLE w/ GEL PILLS. PROBLEMS w/ FILL
ON CONNECTION, CIRC. OUT w/ GEL. POH @ 6AM TO
CHANGE BITS.

~4000 BBL'S WATER PUMPED

CUMULATIVE
MUD COST18,384CUMULATIVE
DAILY COST494,130.

DRILLING REPRESENTATIVE

JAS/RM

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 27 CUM. ROTATING HRS. 2453-20 19 80

| | | | | | | | | | | | | | | |
|---|------------------|---------------|----------------|--------------|-------------------|-----------------|----------------|------------------|--------------|---------------|-----------|-----------|---------------|------|
| WELL NO. | <u>DOS 85-18</u> | FIELD | <u>BEDAWEE</u> | CONTRACTOR | <u>KEAIAI # 7</u> | | | | | | | | | |
| DEPTH | <u>2208</u> | BIT NO. | <u>9</u> | SIZE | <u>12 1/4</u> | MAKE-TYPE | <u>SEC 584</u> | FEET | <u>54</u> | HOURS | <u>12</u> | JETS | <u>NONE</u> | INC. |
| BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | WT. ON BIT | | CONDITION | | / / | | |
| FROM | <u>2154</u> | FT. TO | <u>2208</u> | FT. | <u>54</u> | IN | <u>12</u> | HRS. | <u>18</u> | 1000# | | <u>55</u> | RPM | |
| DRILLING SETUP <u>BIT, 3PTREAMER, LEAD COLLAR, STAB, SHOCK SUB, MONG, STAB,</u> | | | | | | | | | | | | | | |
| <u>10 D.C., XOVER, D.P.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | <u>BASALT</u> | PUMP PRESS. | <u>200</u> | PSI@ | <u>60</u> | SPM | | | | |
| SIZE | | DEPTH | | | | | | | | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | TYPE | <u>GEL</u> | WEIGHT | <u>8.8</u> | PCF | <u>45</u> | SEC. | <u>17</u> | CPS | | |
| YIELD PT. | <u>11</u> | #/100 SQ. FT. | | WATER LOSS | <u>18</u> | CC | | HT-HP WATER LOSS | <u>4 1/2</u> | SOLIDS | <u>3</u> | % | <u>TR</u> | |
| CHLORIDE | <u>200</u> | PPM | % | CA | <u>20</u> | PPM | <u>8.0</u> | pH | ALK | GALS (% MIN.) | | | OTHER REMARKS | |
| SURVEYS | | | | | | | | | | | | | | |

TAIL POH. CHANGED BHA. RIH. DRILLED AHEAD BLIND BY WATER FROM 2154'-2156'. REGAINED PARTICLE CIRC. CIRC + COND MUD. REGAINED FULL CIRC. DRILLED 12 1/4" F/ 2156'-2208' @ 6AM. TEMP. AFTER CIRC. WAS STABLE:

IN 79° OUT 102°

6AM IN 126° OUT 136°

CUMULATIVE
MUD COST19,602CUMULATIVE
DAILY COST505,143

DRILLING REPRESENTATIVE

SAS/RBA.

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 28 CUM. ROTATING HRS. 2583-21 19 80

NO. DOE 85-18 FIELD BEDAWEE CONTRACTOR KENAI # 7
 DEPTH 2287 BIT NO. 9 SIZE 12 1/4 SEC 584 MAKE-TYPE 133 FEET 25 1/2 HOURS 25 JETS 1 CONDITION UPHE T-2 B-2
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 2208 FT. TO 2287 FT. 79 FT. IN 13 1/2 HRS. 25 1000# 55 SPEED RPM
 DRILLING SETUP SAME

LAST CASING 13 1/2 AT 1006 FORMATION EASALT PUMP PRESS. 400 PSI@ 56 SPM
 SIZE DEPTH
 PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.
 DRLG. FLUID BAROID GEL 8.8 PCF 25 SEC. 17 CPS
 MUD CO. TYPE WEIGHT FUNNEL VISC. PLASTIC VISC.
11 #/100 SQ. FT. 18 CC 4 1/2 FILTER CAKE 3 % 0 %
 YIELD PT. WATER LOSS HT-HP WATER LOSS SOLIDS SAND
200 PPM % 200 PPM 8.0 pH ALK GALS (% MIN.) OTHER REMARKS
 CHLORIDE OIL CA
 SURVEYS 2257' 20° 20' S 59 W

FAIL DRLD. 12 1/4" HOLE F/ 2208'-2279'. CIRC + SURVEYED. PON.
TIGHT BRAKES. PICK UP DYNAMITE.

GAM MUD IN 138° - OUT 148°

CUMULATIVE MUD COST 19,879 CUMULATIVE DAILY COST 513,685. DRILLING REPRESENTATIVE SAS/RJA
 RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 29 CUM. ROTATING HRS. 262 3/4 3-22 1980

| | | | | | | | | | | | | | | | |
|----------------|--|---------------|----------------|--------------|------------------|-----------------|-----------------|------------------|--------------|---------|--------------|------|---------------|---------|-----------|
| WELL NO. | <u>D08 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | | | | | | |
| DEPTH | <u>2345</u> | BIT NO. | <u>10</u> | SIZE | <u>12 1/4</u> | MAKE-TYPE | <u>SEC GM88</u> | FEET | <u>58</u> | HOURS | <u>4 1/2</u> | JETS | <u>15 1/2</u> | T-2 Q-G | CONDITION |
| FROM | <u>2287</u> | FT. TO | <u>2345</u> | FT. | <u>58</u> | IN | <u>4 1/4</u> | HRS. | <u>15</u> | 1000# | | | | | RPM |
| WT. ON BIT | | | | | | | | | | | | | | | |
| DRILLING SETUP | <u>BIT, BIT SUB, DIAH, KICK SUB, XOVER, MACHEL, STAR, 6 D.C., X-OVER, D.P.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | <u>BASALT</u> | PUMP PRESS. | <u>1000</u> | PSI@ | <u>43</u> | SPM | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT/SEC. | | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | GEL | | TYPE | <u>9.0</u> | PCF | <u>15</u> | SEC. | <u>30</u> | CPS | | | |
| | | | | | | | | FUNNEL VISC. | | | | | | | |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | | <u>14</u> | CC | WATER LOSS | | HT-HP WATER LOSS | <u>4 1/2</u> | SOLIDS | <u>4</u> | % | | | |
| CHLORIDE | <u>200</u> | PPM | % | <u>200</u> | PPM | pH | <u>9.0</u> | ALK | | | | | | | |
| SURVEYS | <u>2301.</u> | <u>1045</u> | | <u>871W</u> | | | | GALS (% MIN.) | | | | | | | |
| | | | | | | | | | | | | | | | |
| OTHER REMARKS | | | | | | | | | | | | | | | |

DETAIL P/I U DYNIA + BHA. TWISTED OFF 1 D.C. PIN WHILE
MAKING IT UP. RIH. DYNIA DRLP F/ 2287'-2345. DYNIA
FAILED. PON @ 6 AMZ.

CUMULATIVE
MUD COST20,263CUMULATIVE
DAILY COST524,064.

DRILLING REPRESENTATIVE

SAS / RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 30 CUM. ROTATING HRS. 273^{3/4}3-23 19 80

| | | | | | | | | | | | | | | |
|--|--------------------------------------|---------------|----------------|--------------|------------------|---------------|-----------------|--------|-----------|---------------|--------------|-------|----------------|---------------|
| NO. | <u>DDE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | | | |
| DEPTH | <u>2437</u> | BIT NO. | <u>11</u> | SIZE | <u>12 1/4</u> | MAKE-TYPE | <u>SEC. S84</u> | FEET | <u>92</u> | HOURS | <u>11</u> | JETS | <u>1515,15</u> | INC. |
| FROM | <u>2345</u> | FT. TO | <u>2437</u> | FT. | <u>92</u> | IN | <u>11</u> | HRS. | <u>25</u> | WT. ON BIT | 1000# | SPEED | <u>55</u> | RPM |
| DRILLING SETUP <u>BIT, 3 PT REAMER, SHOCK SUB, MONEL, STAR, 8 D.C.</u> | | | | | | | | | | | | | | |
| <u>20 JTS. H.W. D.P., 4 1/2" D.P.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | <u>BASALT</u> | PUMP PRESS. | <u>1000</u> | PSIG | <u>50</u> | SPM | | | | |
| PUMP OUTPUT | | | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | | NOZZLE VEL. | | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.8</u> | PCF | <u>40</u> | SEC. | <u>7</u> | CPS | | | | |
| | | | | | WEIGHT | FUNNEL VISC. | | | | PLASTIC VISC. | | | | |
| | <u>9</u> | #/100 SQ. FT. | <u>10</u> | CC | HT-HP WATER LOSS | CC | <u>2 1/2</u> | SOLIDS | <u>3</u> | % | <u>1 1/4</u> | % | | |
| | | | | | | FILTER CAKE | | | | | | | | |
| | <u>150</u> | PPM | <u>80</u> | PPM | <u>8.0</u> | | | | | | | | | |
| | CHLORIDE | OIL | CA | pH | ALK | GALS (% MIN.) | | | | | | | | |
| SURVEYS | <u>2376' 1° N 43W 2418' 10° N 8W</u> | | | | | | | | | | | | | OTHER REMARKS |

AIL P/H NEW BHA + 20 JTS 4 1/2" H.W. D.P. RIH. REAMED
DYNA DRIL RUN 2287'-2345'. DRIL. 12 1/4" HOLE 2345'-
2437'. MUD IN 156° - MUD OUT 174°. LOSING 15
BBLS/HR.

| | | | | | |
|------------------------|---------------|--------------------------|----------------|-------------------------|------------------|
| CUMULATIVE MUD COST | <u>20,263</u> | CUMULATIVE DAILY COST | <u>549,476</u> | DRILLING REPRESENTATIVE | <u>SAS / RJA</u> |
| RIG PHONE NO. _____ | | | | | |

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 31 CUM. ROTATING HRS. 286 3/4 3-24 19 80

| | | | | | | | | | | | | |
|---|------------------|---------------|----------------|--------------|----------------------|-----------------|---------------|------------------|--------------|---------------|------------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAUE</u> | CONTRACTOR | <u>KENA # 7</u> | | | | | | | |
| DEPTH | <u>2569</u> | BIT NO. | <u>12</u> | SIZE | <u>12 1/4</u> | MAKE-TYPE | <u>G M 88</u> | FEET | | HOURS | <u>11</u> | CONDITION |
| FROM | <u>2437</u> | FT. TO | <u>2569</u> | FT. | <u>132</u> | IN | <u>13</u> | HRS. | <u>30</u> | 1000# | <u>55</u> | RPM |
| WT. ON BIT <u>SPED</u> | | | | | | | | | | | | |
| DRILLING SETUP <u>BIT, BIT SUB., DYNIA, KICK SUB, X OVER, MOVEE, STAB, 2 D.C.</u> | | | | | | | | | | | | |
| <u>X OVER, 20 JTS. H.W. D.P., X OVER, 4 1/2" D.P.</u> | | | | | | | | | | | | |
| LAST CASING | <u>13 1/8</u> | AT | <u>1006</u> | FORMATION | <u>ALTERED RISER</u> | PUMP PRESS. | <u>1000</u> | PSI | <u>48</u> | SPM | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | |
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | | TYPE | <u>Gel</u> | WEIGHT | <u>8.9</u> | PCF | <u>45</u> | SEC. | <u>22</u> | CPS |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | | WATER LOSS | <u>8</u> | CC | | FUNNEL VISC. | | SOLIDS | <u>4</u> | % |
| CHLORIDE | <u>200</u> | PPM | % | CA | <u>70</u> | PPM | <u>9.5</u> | HT+HP WATER LOSS | <u>3 1/2</u> | SAND | <u>1/4</u> | % |
| SURVEYS | <u>2478'</u> | OIL | CA | pH | <u>2539 1°</u> | ALK | | GALS (% MIN.) | | OTHER REMARKS | | |
| <u>2437'-2569', CIRC + SURVEYED. POH. P/I</u> | | | | | | | | | | | | |

DYNA. RIH. BREAKING CIRC @ SHOE @ 6AM.MUD IN 162° MUD OUT 172°RAN MUD COOLER 45 MIN.CUMULATIVE
MUD COST 22,937CUMULATIVE
DAILY COST 563,945DRILLING REPRESENTATIVE SAS / RDA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 32 CUM. ROTATING HRS. 2933-25 19 80

| | | | | | | | | | | |
|----------------|---|------------------------|----------------------|------------------------|-------------------------------|-------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|
| NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENA # 7</u> | | | | | |
| DEPTH | <u>2603</u> | BIT NO. | <u>12</u> | <u>12½"</u> SIZE | <u>SEC. GM88</u> MAKE-TYPE | <u>34</u> FEET | <u>6½</u> HOURS | <u>202015</u> JETS | <u>T-3 B-5 N</u> CONDITION | |
| | | BIT NO. | <u>11 (R)</u> | <u>12½"</u> SIZE | <u>SEC. 884</u> MAKE-TYPE | <u>34</u> FEET | <u>15</u> HOURS | <u>11</u> JETS | <u>INC.</u> CONDITION | |
| FROM | <u>2569</u> | FT. TO | <u>2603</u> | FT. | <u>34</u> | IN <u>6½</u> HRS. | <u>1000#</u> WT. ON BIT | | RPM | |
| DRILLING SETUP | <u>BIT, 3 PT. REAMER, SHOCK SUB, FLOAT SUB, MONEL, STAB, DC,</u> <u>STAB, 3DC, STAB, 4DC, STAB, XOVER, 20 JTS. H.W. D.P., XOVER, 4" D.P.</u> | | | | | | | | | |
| LAST CASING | <u>13 ¾</u> SIZE | AT | <u>1006</u> DEPTH | FORMATION | <u>ANDSITE</u> | PUMP PRESS. | <u>800</u> PSI@ | <u>52</u> SPM | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. | |
| DRLG. FLUID | <u>BAROID</u> MUD CO. | | <u>GEL</u> TYPE | | <u>8.8</u> WEIGHT | PCF | <u>50</u> FUNNEL VISC. | <u>22</u> SEC. | CPS PLASTIC VISC. | |
| | | <u>10</u> YIELD PT. | #/100 SQ. FT. | <u>8</u> WATER LOSS | CC | HT-HP WATER LOSS | CC | <u>2 1/2</u> FILTER CAKE | <u>4</u> SOLIDS | <u>1/4</u> % SAND |
| | | <u>200</u> CHLORIDE | PPM | <u>60</u> OIL CA | PPM | <u>9.5</u> pH | ALK | GALS (% MIN.) | | |
| SURVEYS | | | | | | | | | | OTHER REMARKS |

TAIL RIH w/ DYNIA DRILL. DRLD. FROM 2569'- 2603'. POH. CHANGED BHA. STAGE IN HOLE @ 1000' AND 2000'. REAMED HOLE FROM 2569'- 2603'. DRLG. AHEAD @ 6AM.

MUD IN 119° MUD OUT 126° COOLER RUNNING SURFACE TEMP. 201° WHEN CIRC. DYNIA DRIL UP.

CUMULATIVE
MUD COST23,474CUMULATIVE
DAILY COST572,970.

DRILLING REPRESENTATIVE

SAS/RM

RIG PHONE NO.

OLY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 33 CUM. ROTATING HRS. 3153-26 1980WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI # 7DEPTH 2791 BIT NO. 11 (RR) SIZE 12 1/4 SEC 584 FEET 188 HOURS 2 JETS 18/18 INC. CONDITIONBIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
FROM 2603 FT. TO 2791 FT. 188 FT. IN 22 HRS. 30 WT. ON BIT 1000# SPEED 55 RPMDRILLING SETUP SAMELAST CASING 13 3/8 AT 1006 FORMATION SANDSTONE + CHECT PUMP PRESS. 800 PSI @ 52 SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. MUD CO. TYPE GEL WEIGHT 8.9 PCF 50 SEC. 21 CPSYIELD PT. 13 #/100 SQ. FT. 7 CC WATER LOSS HT-HP WATER LOSS CC FILTER CAKE 2 1/2 SOLIDS 5 % 14 % SANDCHLORIDE 200 PPM % 40 OIL CA pH 9.5 ALK GALS (% MIN.) OTHER REMARKSSURVEYS 2613' 10 30 N 41 E 2701 10 30 N 34 E

TAIL DRILLED. 12 1/4" HOLE F/ 2603 - 2791. PON TO SHOE @ 6AM.

DRAWWORKS MOTOR DOWN.

MUD IN 83° MUD OUT 105°CUMULATIVE MUD COST 24,587 CUMULATIVE DAILY COST 605,275 DRILLING REPRESENTATIVE SAS / RTA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 34 CUM. ROTATING HRS. 3453/27 1980

| | | | | | | | | | | | | | | |
|-------------|-------------------------|---------------|-----------------|-------------|-----------------|------------------|------------------|--------------|------------------|---------------|---------------|------------|---------------|-----------|
| NO. | D.O.E. <u>85-18</u> | FIELD | <u>Browne</u> | CONTRACTOR | <u>Kenai #7</u> | | | | | | | | | |
| DEPTH | <u>2903</u> | BIT NO. | <u>11 RR</u> | SIZE | <u>12 1/4"</u> | MAKE-TYPE | <u>Sec. S-84</u> | FEET | <u>300</u> | HOURS | <u>.32</u> | JETS | <u>11</u> | CONDITION |
| FROM | <u>2791</u> | FT. TO | <u>2903</u> FT. | BIT NO. | <u>112</u> | SIZE | <u>IN</u> | FEET | <u>10</u> | HRS. | <u>.30</u> | WT. ON BIT | <u>1000#</u> | SPEED |
| LAST CASING | <u>19 3/8"</u> | AT | <u>1006'</u> | FORMATION | <u>800</u> | PUMP PRESS. | | | | PSIG | | SPM | | |
| PUMP OUTPUT | | GPM | | ANNUAL VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | | TYPE | <u>Gel</u> | WEIGHT | <u>9.2</u> PPG | FUNNEL VISC. | <u>45.0</u> SEC. | PLASTIC VISC. | <u>16</u> CPS | | | |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | | WATER LOSS | <u>8.0</u> CC | HT+HP WATER LOSS | CC | FILTER CAKE | <u>2 1/2</u> % | SOLIDS | <u>5</u> % | SAND | | |
| CHLORIDE | <u>200</u> PPM | OIL | % | CA | <u>40</u> PPM | pH | <u>10</u> | ALK | GALS (% MIN.) | | | | | |
| SURVEYS | <u>2794' 1015' N40E</u> | | | | | | | | | | | | OTHER REMARKS | |

MAIL POH. Repair drawworks engine. RIH +/2000', break circ, RIH +/2791'. Drld 12 1/4" hole +/2791' - 2822'. Survey'd. Drld 12 1/4" hole +/2903' @ 6 AM.

MUD IN TEMP 86°MUD OUT TEMP 107° Cooling tower on

LOST 150 bbls during int. F/2791'- 2903'

CUMULATIVE
MUD COST26,796CUMULATIVE
DAILY COST616,567

DRILLING REPRESENTATIVE

BRP/cpmRIG PHONE NO. 704-

DAILY PROGRESS OF DRILLING WELLS

DRILLING DAYS 35 CUM. ROTATING HRS. 332 1/2 3-28 1980

| | | | | | | | | | | | | | | |
|--|------------------|---------------|----------------|--------------|-----------------|------------------|---------------|---------------|---------------|----------|--------------|-----------|----------|-------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KELCO #7</u> | | | | | | | | | |
| DEPTH | <u>2974</u> | BIT NO. | <u>11 (RR)</u> | SIZE | <u>Sec. S84</u> | MAKE-TYPE | <u>371</u> | FEET | <u>39 1/2</u> | HOURS | <u>1 1/2</u> | JETS | <u>1</u> | TORE. |
| BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | WT. ON BIT | | RPM | | CONDITION | | |
| FROM | <u>2903</u> | FT. TO | <u>2974</u> | FT. | <u>71</u> | IN | <u>7 1/4</u> | HRS. | <u>30</u> | 1000# | <u>50</u> | SPEED | | |
| DRILLING SETUP <u>12 1/4" BIT, 3PT REAMER, SHOCK SUB, FLOAT SUB, MONEL, STAB, DC, STAB, 4DC, STAB, 3DC, STAB, X OVER, 20 JTS. H.O.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | <u>800</u> | PUMP PRESS. | <u>52</u> | PSIG | | SPM | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>7.1</u> | WEIGHT | | PCF | <u>45</u> | SEC. | <u>16</u> | CPS | | |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | <u>8</u> | CC | <u>15.1</u> | HT-HP WATER LOSS | CC | FUNNEL VISC. | <u>2 1/2</u> | SOLIDS | <u>5</u> | % | % | |
| CHLORIDE | <u>200</u> | PPM | <u>20</u> | PPM | <u>10</u> | ALK | GALS (% MIN.) | PLASTIC VISC. | | SAND | | | | |
| OIL | CA | pH | | | | | | OTHER REMARKS | | | | | | |

SURVEYS

DETAIL DRILLED 12 1/4" HOLE F1 2903' - 2974'. CIRC + SURVEYED. PON. SHOCK SUB BROKE APART @ MANDREL. (LEFT-BIT, 3PT REAMER, BOTTOM OF SHOCK SUB). TOP FISH @ 2962'. LID SHOCK SUB + MONEL. 1010 FISHING TOTAL MAN. RIM w/ OVERSHOT - OVERSHOT EXTENSION, BUMPER SUB, STAB, 4DC, 20 JTS H.O., D.D. RIM @ 6 AM.

2945 MUD IN 82° MUD OUT 105°
COOLER ON

CUMULATIVE
MUD COST27,706CUMULATIVE
DAILY COST625,984

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 36 CUM. ROTATING HRS. 332 $\frac{1}{4}$ 3-29 19 80

WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | | | |
|-------|-------------|---------|--------------|-----------------------------------|------|----------------|-----------|------------|-------|-------|-----------|
| DEPTH | <u>2974</u> | BIT NO. | <u>9(RR)</u> | <u>12$\frac{1}{4}$</u> | SIZE | <u>Sec 584</u> | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | | SIZE | | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | | WT. ON BIT | 1000# | SPEED | RPM |

DRILLING SETUP 12 $\frac{1}{4}$ BIT, 3PT REAMER, FLOAT SUS, MOVEL, STAB, 1DC, STAR, 3DC, STAB, 4DC, STAB, 20 JTS. HW. D.P.

LAST CASING 13 $\frac{3}{8}$ AT 1006 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | | |
|-------------|---------------|---------------|--------------------|------------|------------|------------------|---------------|-----|--------------|----------|-----------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>62C</u> | TYPE | <u>8.9</u> | WEIGHT | <u>40</u> | PCF | FUNNEL VISC. | SEC. | <u>6</u> | CPS |
| | | | | | | | | | | | | |
| | <u>14</u> | #/100 SQ. FT. | <u>55</u> | WATER LOSS | CC | HT-HP WATER LOSS | <u>7</u> | CC | <u>132</u> | <u>3</u> | <u>TR</u> | % |
| | | | | | | | | | | | | |
| | <u>200</u> | PPM CHLORIDE | <u>280</u> PPM OIL | CA | pH | ALK | GALS (% MIN.) | | | | | |

SURVEYS _____ OTHER REMARKS _____

DETAIL RIH W/ FISHING TOOLS. BROKE CIRC @ 2000', 2950', LOST CIRC.
PIU FISH + PON. RECOVERED BIT, 3PT REAMER, BOTTOM OF
SHOCK TOOL. LID FISHING TOOLS. CHANGED BITS. MIU BHA.
RIH TO 1500'. UNABLE TO OBTAIN CIRC. (LOST 250 BBLs).
RIH TO 2000'. UNABLE TO OBTAIN CIRC. (LOST 500 BBLs).
PULLED UP TO FLUID LEVEL IN PIPE. (LEVEL @ 320'), RIH TO
2000'. UNABLE TO OBTAIN CIRC. (LOST 400 BBLs) @ 6 AM.

| | | | | | |
|---------------------|---------------|-----------------------|----------------|-------------------------|---------------------|
| CUMULATIVE MUD COST | <u>29,155</u> | CUMULATIVE DAILY COST | <u>639,641</u> | DRILLING REPRESENTATIVE | <u>BR. 1.R.T.A.</u> |
| | | | | RIG PHONE NO. | |

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 37 CUM. ROTATING HRS. 332 1/4 3-30 19 50

| | | | | | | | | | | | | |
|--|------------------|---------------|----------------|------------|------------------|---------------|--------------|-----------|---------------|-------|------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAUG</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | |
| DEPTH | <u>2974</u> | BIT NO. | <u>9 (RR)</u> | SIZE | <u>12 1/4"</u> | SEC. | <u>584</u> | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | FTS. | | 1000# | | RPM |
| WT. ON BIT | | | | | | | | | | | | |
| DRILLING SETUP <u>12 1/4 BIT, 3PT REAMER, FLOAT SUB, MONOL, STAB, 1DC, STAB,</u> | | | | | | | | | | | | |
| <u>3DC, STAB, 2DC, STAB, 2DC., 10 JTS. H.W., JARS, 10 JTS H.W., D.P.</u> | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006'</u> | FORMATION | | PUMP PRESS. | | PSIG | | SPM | | |
| | SIZE | DEPTH | | | | | | | | | | |
| PUMP OUTPUT | | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>Gel</u> | TYPE | <u>8.9</u> | PCF | <u>60</u> | SEC. | <u>9</u> | CPS | | |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | | | |
| YIELD PT. | <u>44</u> | #/100 SQ. FT. | <u>40</u> | CC | | CC | <u>6 1/2</u> | <u>3</u> | <u>TR</u> | % | | |
| | | | WATER LOSS | | HT+HP WATER LOSS | | FILTER CAKE | SOLIDS | SAND | | | |
| CHLORIDE | <u>200</u> | PPM | <u>280</u> | PPM | <u>12.5</u> | | | | | | | |
| | OIL | CA | pH | | ALK | GALS (% MIN.) | | | | | | |
| OTHER REMARKS | | | | | | | | | | | | |
| SURVEYS | | | | | | | | | | | | |

FAIL UNABLE TO GAIN CIRC. AFTER TOTAL OF ~ 1150 BBCS MUD.
POH. & CHANGED BHA. P/U JARS + NEW SHOCK SUB. SET UP
RIG TO DRILL BLIND. RIH TO 850'. RAN TEMP SURVEY
OBTAINED 480° (BELIEVED TO BE WRONG). RIH TO 2974 @
6 AM

CUMULATIVE
MUD COST39,141CUMULATIVE
DAILY COST652,916

DRILLING REPRESENTATIVE

BR/RTA

RIG PHONE NO.

PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 38 CUM. ROTATING HRS. 340

3-31 1980

| | | | | | | | | | |
|----------------|------------------|---------|----------------------|-----------------|----------------------|--------------------|---------------------|----------------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEAUVILLE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | |
| DEPTH | <u>3149</u> | BIT NO. | <u>9(RR) 12 1/4"</u> | SEC. <u>584</u> | FEET <u>175'</u> | HOURS <u>7 3/4</u> | JETS <u>16,1818</u> | IN. <u>INK</u> | CONDITION |
| | | | SIZE | MAKE-TYPE | FEET | | | | |
| FROM | <u>2974</u> | FT. TO | <u>3149</u> FT. | <u>175</u> FT. | IN <u>7 3/4</u> HRS. | <u>30</u> | 1000# | <u>55</u> | RPM |
| WT. ON BIT | | | | | | | | | |
| DRILLING SETUP | <u>SAME</u> | | | | | | | | |

LAST CASING 13 3/8 AT 1006 FORMATION PUMP PRESS. 500 PSIG 59 SPM
SIZE DEPTH

PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

| | | | | | | |
|-------------|---------------|------|------------------|--------------|---------------|---------------|
| DRLG. FLUID | <u>BAROID</u> | TYPE | WEIGHT | PCF | SEC. | CPS |
| MUD CO. | | | | FUNNEL VISC. | | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | CC | HT+HP WATER LOSS | CC | 132 | % |
| | WATER LOSS | | | FILTER CAKE | SOLIDS | SAND |
| CHLORIDE | PPM | % | PPM | pH | GALS (% MIN.) | |
| OIL | | CA | | ALK | | OTHER REMARKS |

SURVEYS

FAIL RIH TO 2974'. ATTEMPTED TO FILL HOLE FROM TOP. PUMPED IN 150 BBLS. WATER. DRLD. BLIND w/ WATER 2974'-2995'. CIRC DOWN 250 BBLS. GEL. MAKE CONNECTION. DRLD. BLIND 2995-3025. CIRC DOWN 250 BBLS GEL. PUMPED DOWN 500 BBLS GEL/CCM. DRLD BLIND w/ WATER 3025'-3149; AFTER EACH 30' DRLD. PUMPED GEL/CCM. TOTAL OF ~1000 BBLS. PON 10 STANDS. WAIT ON MUD @ 6 AM.

7 3/4 HRS. BLIND w/ WATER @ 400 BBLS / HR.

TOTAL FLUID DOWN HOLE 3250 BBLS WATER

2000 BBLS MUD/CCM

5250 BBLS TOTAL

CUMULATIVE MUD COST

33,902

CUMULATIVE DAILY COST

669,485

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELLS #562

DRILLING DAYS 39 CUM. ROTATING HRS. 3404-119 80

| | | | | | | | | | | | | | | |
|---|------------------|---------------|-----------------|------------------|------------------|------------------|----------------|--------------|------------|---------------|--------------|-----------|---------------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>REDWAWEE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | | | | | |
| DEPTH | <u>3149</u> | BIT NO. | <u>9(RR)</u> | SIZE | <u>12 1/4</u> | MAKE-TYPE | <u>SEC S84</u> | FEET | <u>175</u> | HOURS | <u>7 3/4</u> | JETS | <u>16/118</u> | CONDITION |
| BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | | CONDITION | | |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | WT. ON BIT | | 1000# | | RPM |
| <u>DRILLING SETUP 12 1/4 BIT, 3PT REAMER, FLOAT SUB, MONEL, STAB, DC, STAB, 3DC, STAB, 2DC, STAB, 2DC, 10JTS H.O!, JARS, 10JTS H.O!, D.P.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | | PUMP PRESS. | | PSI@ | | SPM | | | | |
| SIZE | DEPTH | | | | | | | | | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | <u>GEL/WATER</u> | TYPE | <u>8.9</u> | PCF | <u>100</u> | SEC. | <u>15</u> | CPS | | | |
| YIELD PT. | <u>30</u> | #/100 SQ. FT. | | <u>8</u> | CC | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | | | | |
| | | | | WATER LOSS | | HT-HP WATER LOSS | CC | <u>3 1/2</u> | <u>3</u> | <u>TR</u> | % | | | |
| CHLORIDE | <u>200</u> | PPM | OIL | % | <u>40</u> | CA | pH | FILTER CAKE | SOLIDS | SAND | % | | | |
| | | | | | 10.5 | | ALK | | | | | | | |
| | | | | | | | GALS (% MIN.) | | | | | | | |
| OTHER REMARKS | | | | | | | | | | | | | | |
| SURVEYS | | | | | | | | | | | | | | |

DETAIL WAITING ON MUD. MIXED PIT OF LCM. DECISION MADE TO CORE FROM 3149'- 3179'. PUMPED 250 BBLS. GEL + LCM. @ 2500', DUMPED + CLEANED MUD PIT. MIX HIGH VISC. MUD. RIH TO 3079'. FOUND 70' FILL. CIRC. OUT FILL F/ 3079' TO 3149' w/ 250 BBLS. MUD. PULLED 3 STANDS, WAIT 45 MIN. RIH TO 3119'. FOUND 30' FILL. CIRC OUT FILL F/ 3119' TO 3149' w/ 250 BBLS. MUD. PULLED 3 STANDS, WAIT 45 MIN. RIH TO 3107' FOUND 42' FILL. PULLED 3 STANDS, WAIT 45 MIN. RIH TO 3094', FOUND 55' FILL @ 6am.

CUMULATIVE
MUD COST36,225CUMULATIVE
DAILY COST680,596

DRILLING REPRESENTATIVE

BR/12/24

RIG PHONE NO.

702-635-5556

DAILY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 40 CUM. ROTATING HRS. 3404-219 80

| | | | | | | | | | | | | | | | |
|---|------------------|---------------|----------------|--------------|----------------|------------------|----------------|---------------|------------|------------|--------------|---------------|------------------|-------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI 7</u> | | | | | | | | | | |
| DEPTH | <u>3149</u> | BIT NO. | <u>9(RR)</u> | SIZE | <u>12 1/4"</u> | MAKE-TYPE | <u>SEC 584</u> | FEET | <u>175</u> | HOURS | <u>7 3/4</u> | JETS | <u>16 1/8 18</u> | 2-2-I | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | | 1 1 | |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | WT. ON BIT | | SPEED | | RPM | |
| DRILLING SETUP <u>12 1/4" BIT, 3PT. REAMER, SHOCK SUB, FLOAT SUB, MONEL, STAB, 1DC,</u> | | | | | | | | | | | | | | | |
| <u>STAB, 3DC, STAB, 2DC, STAB, 2DC, 10JTS. H.W., JARS, 10JTS H.W., D.P.</u> | | | | | | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | | PUMP PRESS. | | PSIG | | SPM | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | | |
| DRLG. FLUID | <u>Baeroid</u> | MUD CO. | | <u>Gel</u> | TYPE | | PCF | | SEC. | | CPS | | | | |
| | | | | | | WEIGHT | | FUNNEL VISC. | | | | | | | |
| YIELD PT. | | #/100 SQ. FT. | | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | % | % | % | | | | |
| | | | | | | | | FILTER CAKE | SOLIDS | | | | | | |
| CHLORIDE | PPM | OIL | % | CA | PPM | pH | ALK | GALS (% MIN.) | | | | OTHER REMARKS | | | |
| SURVEYS | | | | | | | | | | | | | | | |

TAIL MIXED HIGH VISC. GEL PILL . PUMPED PILL (400 BBCS)
WHILE CIRC. OUT FILL FROM 3094'- 3149'. POH 10 STANDS.
WAIT ON PILL 5 HRS. RIH TO 3149'. NO FILL. POH. P/I U
CB. RIH @ 6AM w/ CB.

NOTE: THE LCM DISCUSSED IS ON ITS WAY.

CUMULATIVE
MUD COST39,104CUMULATIVE
DAILY COST692,289.

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 41 CUM. ROTATING HRS. 346 1/2 4-3 19 50

| | | | | | | | | | | | |
|-------------|------------------|------------|--------------------------------|------------------|--------------------------|-----------------|-------------------|-------------|-----------|---------------|-----------|
| L NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI</u> | ** 7 | | | | | |
| DEPTH | <u>3188</u> | BIT NO. | <u>CORE HEAD</u> <u>8 3/4"</u> | MAKE-TYPE | <u>DIAMOND</u> <u>30</u> | FEET | <u>6 1/2</u> | HOURS | <u>11</u> | JETS | CONDITION |
| FROM | <u>3158</u> | FT. TO | <u>3188</u> FT. | SIZE | <u>30</u> | IN | <u>6 1/2</u> HRS. | <u>20</u> | 1000# | <u>40</u> | SPEED |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | | PUMP PRESS. | | PSI | | SPM | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | | SEC. | | CPS | |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | 132 | FILTER CAKE | SOLIDS | % | SAND | |
| CHLORIDE | PPM | OIL | % | CA | pH | ALK | GALS (% MIN.) | | | OTHER REMARKS | |
| SURVEYS | | | | | | | | | | | |

RIH TO 3149'. CORED INTERVAL BETWEEN 3149'-3179'. PUMPED GEL WHILE CORING BLIND ~ 1500 BBLS. STRAPPED OUT OF HOLE. CORRECTED DEPTH 3188'. 41D C.B. RIH w/ DRLG. SET UP @ 6am.

CUMULATIVE MUD COST 42,173CUMULATIVE DAILY COST 716,617DRILLING REPRESENTATIVE BR/RJA

RIG PHONE NO. _____

OLY PROGRESS OF DRILLING WELL 70-562

DRILLING DAYS 42 CUM. ROTATING HRS. 346 1/2 4-4 10 80

| | | | | | | | | | | |
|---|------------------|---------------|----------------|------------|------------------|-------------|---------------|----------|-----------|---------------|
| L NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | |
| DEPTH | <u>3187</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION | |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION | |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM | |
| | | | | | | | WT. ON BIT | | | |
| DRILLING SETUP <u>12 1/4" BIT, 3PT REAMER, LEAD COLLAR, STAB, FLOAT SUB, MOWEL, STAB,</u> | | | | | | | | | | |
| <u>DC, STAB, 3DC, STAB, 2DC, STAB, 2DC, 10JTS HW, JARS, 10 JTS NW, D.P</u> | | | | | | | | | | |
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | PUMP PRESS. | | PSI@ | | SPM | |
| | SIZE | DEPTH | | | | | | | | |
| PUMP OUTPUT | | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.8</u> | PCF | <u>50</u> | SEC. | <u>15</u> | CPS |
| | | | | | WEIGHT | | FUNNEL VISC. | | | |
| | <u>25</u> | #/100 SQ. FT. | <u>12</u> | CC | | CC | <u>3 1/2</u> | | | |
| | | | WATER LOSS | | HT-HP WATER LOSS | | FILTER CAKE | | | |
| | <u>150</u> | PPM | <u>0</u> | % | <u>TR</u> | PPM | <u>9.0</u> | | | |
| | CHLORIDE | OIL | CA | pH | ALK | | GALS (% MIN.) | | | |
| | | | | | | | | | | OTHER REMARKS |
| SURVEYS | | | | | | | | | | |

DETAIL REPAIRED SEAL IN HYDRIL. RIH TO 1935'. REAMED
THROUGH BRIDGE TO 1965'. RIH TO 2118'. REAMED
THROUGH BRIDGE TO 2145'. RIH TO 3045', FOUND
142' FILL. CIRC. OUT FILL @ 6AM.

| | | | | | |
|------------------------|---------------|--------------------------|----------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>43,329</u> | CUMULATIVE DAILY COST | <u>727,647</u> | DRILLING REPRESENTATIVE | <u>RR/RJA</u> |
| RIG PHONE NO. _____ | | | | | |

OIL PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 43 CUM. ROTATING HRS. 3484-519 00L NO. DOE 85-18 FIELD _____ CONTRACTOR Kenai #7DEPTH 3208 BIT NO. 9 RR SIZE 12 1/4 MAKE-TYPE Sec. F8Y FEET 20 HOURS 1 1/2 JETS 11 CONDITION _____BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS 11 CONDITION _____FROM 3188 FT. TO 3208 FT. 20 FT. IN 1 1/2 HRS. 30 WT. ON BIT 1000# 1000# 50 SPEED RPMDRILLING SETUP bit, 3 point reamer, L.C., Stab float sub, monel, stab, D.C.
stab, 3-DC, stab, 2 D.C., Stab, 2 DC, 10 H.W., bars, 10 HW, D.P.LAST CASING 13 1/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID Baroid MUD CO. Gel TYPE 8.8 PCF WEIGHT 50 FUNNEL VISC. SEC. 15 CPS PLASTIC VISC.25 #/100 SQ. FT. 12 CC WATER LOSS CC 3 1/2 FILTER CAKE 3 SOLIDS % SAND %150 PPM OIL 1 PPM CA 9 pH ALK GALS (% MIN.)

OTHER REMARKS

SURVEYS _____

DETAIL Circulate out fill, mix Gel pull, circulate, P.O.H. 5' Stands wait 1 hour R.I.H. to 3208 no fill. P.O.H. to 2145' hit bridge work through 100' of tight hole. Ream back through 2045' to 2145' P.O.H. Rig up Schlumberger ran temp. survey hit bridge at 1932' log indicated 1037 circulation zone at 1850' fluid level at 200' log R.I.H. out of hole. R.I.H with drill assy. to 1909' Reamed to 1949' R.I.H to 2219' Reamed to 2259' R.I.H. to 3133' 75' of fill circulate out fill at 6AM.

CUMULATIVE
MUD COST46,897CUMULATIVE
DAILY COST740,064

DRILLING REPRESENTATIVE

B.R.SRIG PHONE NO. 702-635-5556

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 44 CUM. ROTATING HRS. 3484-6- 1980WELL NO. 85-18 FIELD Beawawe CONTRACTOR Kencor #7DEPTH 3208 BIT NO. 9 RR SIZE 12 1/4 MAKE-TYPE Sx S8Y FEET 11 HOURS 11 JETS 11 CONDITION

BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION

FROM _____ FT. TO _____ FT. FT. IN _____ HRS. WT. ON BIT 1000# RPM SPEED

DRILLING SETUP _____

LAST CASING 13 1/2 AT 1006 SIZE DEPTH FORMATION _____ PUMP PRESS. _____ PSI @ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID Bentonite MUD CO. Gel LCM TYPE PCF WEIGHT FUNNEL VISC. SEC. PLASTIC VISC. CPS

| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | 132 FILTER CAKE | % SOLIDS | % SAND |
|-----------|---------------|------------|-----|------------------|-----|-----------------|---------------|--------|
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | |
| OIL | CA | | | | | | | |

SURVEYS _____

DETAIL Circulate out fill to 3208' mix gel pill spot on bottom R.O.H. no bridges. Rig up Schlumberger Run temp. survey hit bridge at 1355' P.O.H. Run sonic log stopped at 1355' Rig down loggers. R.I.H. hit bridge at 1350 circulate mixed L.C.M. spot pill at 1350' P.O.H. 5 stands wait 1 hour. Unable to fill hole from surface. Spot L.C.M. pill at 1350' Pull up 5 stands wait 1 hour. unable to fill hole from surface. R.I.H. and reamed through plug at 1350 at 6:AM.

CUMULATIVE MUD COST 50,729CUMULATIVE DAILY COST 763,259DRILLING REPRESENTATIVE B.R.R.

RIG PHONE NO. _____

ONLY PROGRESS OF DRILLING WELL. No-562

DRILLING DAYS 45 CUM. ROTATING HRS. 348

4-7

19 80

WELL NO. 85-18

FIELD Bowmore

CONTRACTOR

Kenai #7

DEPTH 3208

BIT NO. 9 RR

SIZE 12 1/4

MAKE-TYPE Sec S 84

FEET

HOURS

JETS 11

CONDITION

BIT NO.

SIZE

MAKE-TYPE

FEET

HOURS

JETS 11

CONDITION

FROM

FT. TO

FT.

IN

HRS.

WT. ON BIT

1000#

SPEED

RPM

DRILLING SETUP

LAST CASING 13 1/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| DRLG. FLUID | MUD CO. | TYPE | PCF | SEC. | CPS |
|-------------|---------------|------------|------------------|---------------|---------------|
| | | | WEIGHT | FUNNEL VISC. | PLASTIC VISC. |
| | #/100 SQ. FT. | CC | CC | 1/32 | % |
| | YIELD PT. | WATER LOSS | HT-HP WATER LOSS | FILTER CAKE | SOLIDS |
| | PPM | % | PPM | PPM | % |
| CHLORIDE | OIL | CA | pH | ALK | SAND |
| | | | | GALS (% MIN.) | OTHER REMARKS |

SURVEYS

...AII Hit bridge at 1852' mix L.C.M. Spout at 1852' Required circulation. Circulate and condition mud, lost circulation after 6 hours. Spot L.C.M. at 1852' P.O.U. 5 stands wait 2 hours. Regained circulation at 1852' Circulating at 6 AM.

Lost circ again at 7 AM.

CUMULATIVE
MUD COST

59520

CUMULATIVE
DAILY COST

726,950

DRILLING REPRESENTATIVE

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 46 CUM. ROTATING HRS. 3484-819 80NO. DAE. 85-16FIELD Beowawe

CONTRACTOR

Renai #7

| | | | | | | | |
|-------------------|--------------------|--------------------|---------------------------|------------|-------|-------|-----------|
| DEPTH <u>3208</u> | BIT NO. <u>9RR</u> | SIZE <u>12 1/4</u> | MAKE-TYPE <u>SEC. S84</u> | FEET | HOURS | JETS | CONDITION |
| BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM _____ | FT. TO _____ | FT. _____ | IN _____ | HRS. _____ | 1000# | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID Bayloid MUD CO. Gel & L.C.M. TYPE 9.2 PCF 50 SEC. 20 CPS
 PLASTIC VISC.

| | | | | | | |
|---------------------|---------------|---------------|---------------------|------------------------|----------|--------|
| <u>18</u> YIELD PT. | #/100 SQ. FT. | WATER LOSS CC | HT-HP WATER LOSS CC | <u>132</u> FILTER CAKE | % SOLIDS | % SAND |
|---------------------|---------------|---------------|---------------------|------------------------|----------|--------|

| | | | | | | |
|--------------|-------|--------|----|-----|---------------|---------------|
| CHLORIDE PPM | OIL % | CA PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |
|--------------|-------|--------|----|-----|---------------|---------------|

SURVEYS _____

RETAILED Regained circulation last one hour, spot L.C.M. pill at 1850'; wait 3 hrs.
 MIX L.C.M., Spot at 1850' wait 3 hrs. Unable to fill hole through kill line.
 Water pump broke down, one pump repaired. Threw out water lines
 at 6:AM

CUMULATIVE
MUD COST64,318CUMULATIVE
DAILY COST808,561

DRILLING REPRESENTATIVE

BRR/cf

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS 0-562

DRILLING DAYS 47 CUM. ROTATING HRS. 3484-91980

WELL NO. 85-18 FIELD Beowawe CONTRACTOR Kenai #7
 DEPTH 3208 BIT NO. 9RR SIZE 12 1/4 MAKE-TYPE Sec 584 FEET No
11 HOURS JETS CONDITION
 BIT NO. SIZE MAKE-TYPE FEET HOURS JETS CONDITION
 FROM _____ FT. TO _____ FT. IN _____ HRS. 1000# RPM
 WT. ON BIT SPEED

DRILLING SETUP Same

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI @ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | |
|---------------------------|--------------------------|---------------|---------------------|----------------|-----------------|-----|---------------|
| DRLG. FLUID <u>Baroid</u> | MUD CO. <u>Gel - LCM</u> | TYPE | WEIGHT | PCF <u>70</u> | SEC. <u>132</u> | CPS | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | CC WATER LOSS | CC HT-HP WATER LOSS | CC FILTER CAKE | SOLIDS % | % | SAND |
| CHLORIDE PPM | OIL % | CA PPM | pH ALK | GALS (% MIN.) | OTHER REMARKS | | |

SURVEYS _____

TAILED Mix L.G.M. pill and spot at 972' regain circulation at 12 NOON. Stage in hole at 1032; 1092', 1451', 1757', 2152', 2227', 2516'; 2819', 2950'. Bridges encountered at 1850' to 1870' at 2152' to 2162'; at 2222' to 2232' Ramed through bridges at rate of 5' per hour. Circulation rate still sensitive. Lost approx 250 bbls mud in last 18 hrs sense circulation established. (due to over loading hole) Circulate at 2950' at 6.4 M. 100% returns

Mud in 116° mud out 140°

CUMULATIVE
MUD COST67,518CUMULATIVE
DAILY COST824,019DRILLING REPRESENTATIVE S.A.S./CF

RIG PHONE NO. _____

OIL PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 48 CUM. ROTATING HRS. 3484-10- 1980

NO. 85-18 FIELD Beowawe CONTRACTOR Kenai #7

| | | | | | | | |
|-------------------|--------------------|--------------------|--------------------------|------------|-------------|------------------|-----------|
| DEPTH <u>3208</u> | BIT NO. <u>9RR</u> | SIZE <u>12 1/4</u> | MAKE-TYPE <u>Sec 584</u> | FEET | HOURS | JETS <u>11</u> | CONDITION |
| BIT NO. _____ | | SIZE _____ | MAKE-TYPE _____ | FEET _____ | HOURS _____ | JETS <u>11</u> | CONDITION |
| FROM _____ | FT. TO _____ | FT. _____ | IN _____ | HRS. _____ | 1000# | WT. ON BIT _____ | RPM |

DRILLING SETUP SameLAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. 300 PSI @ 48 SPM

SIZE DEPTH PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

| | | | | |
|--------------------------------------|--------------------------|-----------------------|-----------------------------|-----------------------------|
| DRLG. FLUID <u>Baroid</u> MUD CO. | TYPE <u>Gel LCM</u> | WEIGHT <u>8.7</u> PCF | FUNNEL VISC. <u>65</u> SEC. | PLASTIC VISC. <u>25</u> CPS |
| YIELD PT. <u>21</u> #/100 SQ. FT. | WATER LOSS <u>8.4</u> CC | HT-HP WATER LOSS CC | FILTER CAKE <u>2 1/2</u> | SOLIDS <u>3</u> % |
| CHLORIDE <u>230</u> PPM | OIL <u>80</u> % | CA <u>pH 8</u> | ALK | GALS (% MIN.) |

OTHER REMARKS

SURVEYS

TAIL Circulate and condition at 2850 R/H and lay fill at 3164';
 44' of fill, pull to shoe wait 5 hrs. Stage in hole at 300'
 intervals hit small bridge at 1350' circulate and condition
 mud at 2950. P.O.H. Lay down bottom hole assy at
 6 AM.

CUMULATIVE MUD COST 69065CUMULATIVE DAILY COST 833,414DRILLING REPRESENTATIVE S.A.S.RIG PHONE NO. 702 635 5556

OIL PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 49 CUM. ROTATING HRS. 3484-111980WELL NO. D.O.E. 85-18 FIELD BEDUAWE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|------------|------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | | |

DRILLING SETUP _____

| | | | | | | | |
|-------------|---------------|-------|-------------|-----------|-------------|------|-----|
| LAST CASING | <u>13 3/8</u> | AT | <u>1006</u> | FORMATION | PUMP PRESS. | PSI@ | SPM |
| SIZE | | DEPTH | | | | | |

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------------|------------|------------------|-----|--------------|---------------|-----------|---------------------|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.7</u> | WEIGHT | PCF | <u>37</u> | SEC. | <u>15</u> | CPS |
| YIELD PT. | <u>11</u> | #/100 SQ. FT. | <u>8.7</u> | WATER LOSS | CC | HT+HP WATER LOSS | CC | <u>2 1/2</u> | SOLIDS | <u>3</u> | % <u>1/4</u> SAND % |
| CHLORIDE | <u>730</u> | PPM | <u>80</u> | CA | PPM | pH | ALK | | GALS (% MIN.) | | OTHER REMARKS |

SURVEYS _____

DETAIL LAY DOWN DRILL COLLARS. R.I.H. WITH OPEN END DRILL PIPE TO 3093' CIRCULATE AND CONDITION MUD. RIG UP B.J., PUMPED 59 SACKS OF 8X12 GRAVEL, B.J. PUMP BROKE DOWN. PULL 5 STANDS WAIT 2 HRS. R.I.H TO 3197' NO PLUG, PULL TO SHOE WAIT ON GRAVEL PACKER FROM BAKERSFIELD AT 6:AM

| | | | | | |
|------------------------|--------------|--------------------------|----------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>69065</u> | CUMULATIVE DAILY COST | <u>845.155</u> | DRILLING REPRESENTATIVE | <u>SAS/CF</u> |
|------------------------|--------------|--------------------------|----------------|-------------------------|---------------|

RIG PHONE NO. 702-635-5556

OIL PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 50 CUM. ROTATING HRS. 3484-12- 1980WELL NO. D.O.E. 85-18 FIELD Beowawe CONTRACTOR Kenai #7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|------------|-------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | SPEED | |

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------------|------------|------------------|---------------|--------------|--------------|--------|-----------|-----|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>Gel</u> | TYPE | <u>8.8</u> | WEIGHT | PCF | <u>40</u> | FUNNEL VISC. | SEC. | <u>12</u> | CPS |
| YIELD PT. | <u>11</u> | #/100 SQ. FT. | <u>8.8</u> | WATER LOSS | CC | HT-HP WATER LOSS | CC | <u>2 1/2</u> | FILTER CAKE | SOLIDS | <u>4</u> | % |
| CHLORIDE | <u>220</u> | PPM OIL | <u>64</u> | PPM CA | pH | ALK | GALS (% MIN.) | | | SAND | <u>7</u> | % |

SURVEYS _____

DETAIL Stage in hole from shoe to 3197' Rig up gravel packer, pump 234 sec/cy 6x12 gravel, 28% excess. Top top of gravel plug at 2947' P.O.H. R.L.H. with 12 1/4 bit and 2 D.C. at 6 AM

CUMULATIVE MUD COST 69702CUMULATIVE DAILY COST 860 950DRILLING REPRESENTATIVE S.A.S./CFRIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS

No-562

DRILLING DAYS 51 CUM. ROTATING HRS. 348

4-13

19 80

WELL NO. D.O.E. 85-18 FIELD Browawie CONTRACTOR Kenai #7

| | | | | | | | |
|-------------------|--------------|------|-----------|------------|------------|-------|-----------|
| DEPTH <u>3208</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM _____ | FT. TO _____ | FT. | IN _____ | HRS. _____ | WT. ON BIT | 1000# | RPM |

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | |
|---------------------------|--------------------|------|------------------|---------------|---------------|------|
| DRLG. FLUID <u>Boroid</u> | MUD CO. <u>Gel</u> | TYPE | WEIGHT | PCF | SEC. | CPS |
| #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | % |
| YIELD PT. | PPM | % | pH | ALK | SOLIDS | SAND |
| CHLORIDE | OIL | CA | | GALS (% MIN.) | OTHER REMARKS | |

SURVEYS _____

DETAIL Stage in hole with 12 1/4" bit circulate up gravel string through
out hole tag sand plug at 2947' Circulate and condition
mud. P.O.H. Lay down bottom Assy. Rig up casing tools
Run 51 Jts 9 5/8 40# N80 Butt casing. Make up Baker helix
9 5/8 x 13 3/8 liner hanger equipped with tie back connections
at 6000' (Stage casing in hole at 340; 1512; 2140,)

CUMULATIVE
MUD COST 70,127

CUMULATIVE
DAILY COST 869,211

DRILLING REPRESENTATIVE S.A.S./CF

RIG PHONE NO. 702 635-5556

OLY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 52 CUM. ROTATING HRS. 348

4-14- 1980

✓ NO. D.O.E . 85-18 FIELD Beowawe CONTRACTOR Kenai #7

| | | | | | | | | |
|-------|-------------|---------|------|-----------|------|------------|------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | WT. ON BIT | | SPEED |

DRILLING SETUP _____

LAST CASING 13³/₈ AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | |
|-------------|---------------|------------|------|------------------|-----|---------------|------|-----|
| DRLG. FLUID | <u>Bารoid</u> | MUD CO. | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | % | % |
| CHLORIDE | PPM | OIL % | CA | pH | ALK | GALS (% MIN.) | SAND | |

SURVEYS _____

DETAIL Make up liner hanger Bakerline did not have right cross over sub from liner hanger Kelly to packer assembly. Wait on sub. Make up packer assembly and start off at Drill pipe. Could not work liner hanger past complete shut off valve. One slip die off lines hanger fell into hole D.O.H. laying down casing at 6 AM.

CUMULATIVE MUD COST 70 340

CUMULATIVE DAILY COST 879,961

DRILLING REPRESENTATIVE SAS /CF

RIG PHONE NO. 702 635-5556

DAY PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 53 CUM. ROTATING HRS. 348APRIL 15 1980WELL NO. D.D.E 85-18 FIELD BEDOUIN CONTRACTOR KENAI 7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|-------|------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |

DRILLING SETUP _____

LAST CASING 13 3/8 AT 1006 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|---------|------------|------|------------------|-----|---------------|---------------|---------------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>Gel</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
| YIELD PT. | #/100 SQ. FT. | CC | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | SOLIDS | % | % |
| CHLORIDE | PPM | % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | |
| OIL | | | | | | | | | | |

SURVEYS _____

DETAIL Lay down 9 5/8 casing. Pick up Halliburton 13 3/8 retrievable bridge plug set at 60' take out B.O.P.E. Remove gate valve (Gate valve I.D. 12 3/8) (liner hanger O.D. 12 3/16) Dress internal casing to well head weld and nipple up class III B.O.P.E. at 6 1/2 in

CUMULATIVE MUD COST 70340CUMULATIVE DAILY COST 890,133DRILLING REPRESENTATIVE SAS/CFRIG PHONE NO. 702 635-5556

D(Y) PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 54 CUM. ROTATING HRS. 348

4-16 19 80

| | | | | | | | |
|--|-----------------|-------------------|--------------------|-------------|-------------------|--------------------------|-----------|
| NO. D.O.E. 85-18 | FIELD BEOWAUE | CONTRACTOR KERJAI | 7 | | | | |
| DEPTH 3208 | BIT NO. # 1 RR | SIZE 17 1/4 | MAKE-TYPE SEC M44N | FEET | HOURS | JETS | NONE |
| | | | | | | | / |
| BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | FT. TO | FT. | IN | HRS. | WT. ON BIT | 1000# | SPEED |
| DRILLING SETUP BIT, FLOAT SUB, BIT SUB, I-D.C., 20 JTS. H.W.D.P., D.P. | | | | | | | |
| LAST CASING 13 3/8 | AT 1000 | DEPTH | FORMATION | PUMP PRESS. | PSI@ | SPM | |
| PUMP OUTPUT | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. | | |
| DRLG. FLUID BAROID | MUD CO. | GEL TYPE | 8.7 WEIGHT | PCF | 35 FUNNEL VISC. | SEC. 8 CPS PLASTIC VISC. | |
| 4 #/100 SQ. FT. | 12.8 WATER LOSS | CC | HT-HP WATER LOSS | CC | 2 1/2 FILTER CAKE | 3 % SOLIDS | % SAND |
| 230 PPM CHLORIDE | OIL % | CA 72 PPM | pH 8 | ALK | GALS (% MIN.) | OTHER REMARKS | |
| SURVEYS | | | | | | | |

TAIL INSTALLED CLASS III B.O.P.E. AND TEST. BRIDGE PLUG WAS PUMPED DOWN HOLE WITH 200PSI. STAGED IN HOLE TO 2947' CIRCULATE AND CONDITION MUD P.O.H. LAYING DOWN DRILL COLLAPS AT 6AM

CUMULATIVE MUD COST 71190

CUMULATIVE DAILY COST 900,605

DRILLING REPRESENTATIVE SAS/CE

RIG PHONE NO. 702 635-5556

DA PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 55 CUM. ROTATING HRS. 3484-1719 80WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|-------|------------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | | WT. ON BIT | SPEED |

DRILLING SETUP _____

| | | | | | | | |
|-------------|-------------|-------|-------------|-----------|-------------|------|-----|
| LAST CASING | <u>9518</u> | AT | <u>2946</u> | FORMATION | PUMP PRESS. | PSI@ | SPM |
| SIZE | | DEPTH | | | | | |

| | | | | | | |
|-------------|--|-----|--------------|-----------------|-------------|----------|
| PUMP OUTPUT | | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. |
|-------------|--|-----|--------------|-----------------|-------------|----------|

| | | | | | | | | | |
|-------------|---------------|---------|------------|------------------|--------|---------------|---------------|--------|---------------|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEC</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS |
| YIELD PT. | #/100 SQ. FT. | CC | WATER LOSS | HT-HP WATER LOSS | CC | 132 | % | SOLIDS | PLASTIC VISC. |
| CHLORIDE | PPM | % | CA | pH | ALK | GALS (% MIN.) | | | % |
| OIL | | | | | | | OTHER REMARKS | | |

SURVEYS _____

DETAIL TEST BOPE TO 1000 PSZ. RIG UP CSG. TONGS. RAN 51 JTS. OF 9518" 40# N-80 BUTT CSG. W/ BAKER-LINE LINER HANGER W/ TIE BACK CONNECTION. SHOE @ 2948'. TOP LINER 2945'. CIRC. CSG. 3 HRS @ 2948'. HALLOBUCKET CMT'D AS FOLLOWS: PREFLUSH 100 C/F WATER, 100 C/F CaCl_2 , 100 C/F WATER, 100 C/F SODIUM SILICA, 100 C/F WATER. PUMPED 1800 C/F CMT. (200% EXCESS) CLASS "G", 1:1 PERRILITE, 35% SILICA FLOUR, 3% GEL, 1/2% CFR 2. DISPLACED W/ 938 C/F MUD. LOST CIRC. W/ 50 C/F LEFT TO DISP. CIP @ 1:10 AM. PULLED OUT 60'. CIRC. P.O.H. RIG W/ 12 1/4" BIT @ 6 AM.

CUMULATIVE
MUD COST71190CUMULATIVE
DAILY COST980,825

DRILLING REPRESENTATIVE

SAS/RJA

RIG PHONE NO. _____

DA PROGRESS OF DRILLING WELLS 562

DRILLING DAYS 56 CUM. ROTATING HRS. 3484-18 1980AL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | |
|-------|-------------|---------|------|-----------|------|------------|------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | WT. ON BIT | | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|--------|---------------|---------------|--------|---------------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | | |
| OIL | | CA | | | | | | | | |

SURVEYS _____

ALL POH WI 12 1/4 BIT. TEST LAP FROM SURFACE, NO GOOD.
WOULD PUMP AWAY WI 250 PSI. PIU 5 3/4" D.C. +
STAND IN DERRICK. PREP LOCATION FOR DST. MAKE
RTTS TOOL @ GAM.

| | | | | | |
|------------------------|--------------|--------------------------|----------------|-------------------------|---------------------|
| CUMULATIVE MUD COST | <u>71245</u> | CUMULATIVE DAILY COST | <u>982,285</u> | DRILLING REPRESENTATIVE | <u>SAS/RJA</u> |
| | | | | RIG PHONE NO. | <u>702-635-5556</u> |

ONLY PROGRESS OF DRILLING WELL #~~10~~-562

DRILLING DAYS 57 CUM. ROTATING HRS. 348

4-19 1980

| | | | | | | | | | |
|----------|------------------|---------|-----------------|------------|-----------------|------|------------|-------|-----------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BECKDALE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | |
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | SPEED | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 ^{top} FORMATION @ 785 PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | |
|-------------|---------------|------|------------------|-----|-----------------|----------|--------|
| DRLG. FLUID | <u>BAROID</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS |
| MUD CO. | | | | | | | |
| YIELD PT. | #/100 SQ. FT. | CC | HT+HP WATER LOSS | CC | 132 FILTER CAKE | % SOLIDS | % SAND |
| CHLORIDE | PPM | % | PPM | ALK | GALS (% MIN.) | | |
| OIL | | CA | pH | | | | |

SURVEYS _____

DETAIL RIH w/ RTTS TOOL TO 728'. TOOL WOULD NOT HOLD PRESSURE. POH. PACKER O.K. RIH w/ H.W. D.P. TO 723'.
HALLOBURTON SQUEEZED; 50CIF WATER PREFLUSH, 58CIP
CALCI2, 100CIP WATER, 58CIP FLO-CHECK, 50CIP WATER.
INITIAL PRESSURE 500 PSI. PREFLUSH BROKE PRESSURE
TO 0. PUMPED 650CIP CLASS "G" CMT. w/ 1:1 PERRILITE
40% SILICA FLOUR, 3% GEL, 3/4% CFR-2. PUMPED @ RATE
OF 2 BBCS/MIN. PRESSURE STARTED BUILDING WHEN
500CIP WAS MIXED. DISPLACED D.P. w/ 80CIP MUD @
1BBL/MIN. FINAL SQUEEZE PRESSURE 600 PSI. CIP
@ 4PM. POH. LID RTTS. RIH w/ 12 1/4" BIT, CIRC OUT EXCES.
POH. WOC. TEST LAP @ 4AM w/ 500 PSI. FOR 15 MIN. OK.
TEAR OUT BOPE @ 6AM.

| | | | | | |
|------------------------|---------------|--------------------------|------------------|-------------------------|----------------|
| CUMULATIVE MUD COST | <u>71,445</u> | CUMULATIVE DAILY COST | <u>1,054,803</u> | DRILLING REPRESENTATIVE | <u>SAS/RJA</u> |
|------------------------|---------------|--------------------------|------------------|-------------------------|----------------|

RIG PHONE NO. _____

OLY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 58 CUM. ROTATING HRS. 350

4-20 to 80

| | | | | | | | | | | | | | |
|----------|--------------------|---------|----------------|------------|------------------------------------|-----------|----------------|------|----------|------------|-------------|--------|-------------|
| WELL NO. | <u>DOE 85 - 18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | | | | |
| DEPTH | <u>3208</u> | BIT NO. | <u>13</u> | SIZE | <u>8³/₄"</u> | MAKE-TYPE | <u>SEC. S3</u> | FEET | <u>2</u> | JETS | <u>NONE</u> | CONDN. | <u>ING.</u> |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | WT. ON BIT | | SPEED | |

DRILLING SETUP _____

| | | | | | | | |
|-------------|-----------------------------------|----|-------------|-----------|-------------|-----|-----|
| LAST CASING | <u>9⁵/₈</u> | AT | <u>2739</u> | FORMATION | PUMP PRESS. | PSI | SPM |
| SIZE | DEPTH | | | | | | |

| | | | | | |
|-------------|-----|--------------|-----------------|-------------|----------|
| PUMP OUTPUT | GPM | ANNULAR VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | FT./SEC. |
|-------------|-----|--------------|-----------------|-------------|----------|

| | | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|--------|---------------|---------------|--------|-----|---|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>Gel</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | <u>132</u> | FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | OIL | CA | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | | |

SURVEYS _____

DETAIL REMOVED BOPE. INSTALLED MASTER GATE VALVE.

NIPPLE UP CLASS III BOPE. TEST BLIND RAMS @ 1000 PSI.

RIH w/ 8³/₄" BIT TO 785'. C10 CMT 785'-805'. RIH TO

2809' TAGGED CMT. TESTED CSG. + BOPE. TO 1000 PSI.

DRLD CMT TO 2890 @ 6 AM.

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|----------------|
| CUMULATIVE MUD COST | <u>71,510</u> | CUMULATIVE DAILY COST | <u>1,083,312</u> | DRILLING REPRESENTATIVE | <u>SAS/RJA</u> |
|---------------------|---------------|-----------------------|------------------|-------------------------|----------------|

RIG PHONE NO. _____

OLY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 59 CUM. ROTATING HRS. 360

4-21 10 80

| | | | | | | | | | | | | | | |
|----------------|---|---------|----------------|------------|-----------------|-----------|----------------|------|----------------------|------------|-------------|-------|-------------|-----------|
| L NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | | | |
| DEPTH | <u>3208</u> | BIT NO. | <u>13</u> | SIZE | <u>8 3/4"</u> | MAKE-TYPE | <u>SEC 5-3</u> | FEET | <u>C/0 GRAVEL 12</u> | HOURS | <u>NONE</u> | JETS | <u>INC.</u> | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | <u>11</u> | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | WT. ON BIT | | 1000# | | RPM |
| DRILLING SETUP | <u>8 3/4" BIT, BIT SUB, 10 D.C., 20 JTS. H.W.D.P.</u> | | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|-------------|---------------|---------------|-------------|-------------|-----------------|------------------|------|---------------|---------------|---|---|--|--|
| LAST CASING | <u>95/8</u> | AT | <u>2937</u> | FORMATION | PUMP PRESS. | | PSIG | | SPM | | | | |
| SIZE | | DEPTH | | | | | | | | | | | |
| PUMP OUTPUT | | GPM | | ANNUAL VEL. | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. | | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | <u>GEL</u> | TYPE | <u>8.8</u> | PCF | <u>45</u> | SEC. | | | | |
| | | | | | | WEIGHT | | FUNNEL VISC. | PLASTIC VISC. | | | | |
| | | #/100 SQ. FT. | | WATER LOSS | CC | HT-HP WATER LOSS | CC | <u>132</u> | SOLIDS | % | % | | |
| | | YIELD PT. | | | | | | FILTER CAKE | | | | | |
| | | PPM | % | PPM | | pH | | PPM | | | | | |
| | | CHLORIDE | OIL | CA | | ALK | | GALS (% MIN.) | | | | | |
| SURVEYS | OTHER REMARKS | | | | | | | | | | | | |

DETAIL C/0 CMT FROM 2890' TO SHOE @ 2937'. C/0 SAND PLUG 2937'-3208'. CIRC + COND MUD. P.O.H. HALOBURNDI TOOL TRUCK BROKE DOWN IN RENO w/ DST TOOLS. RIH w/ 8 3/4" BIT. CIRC + COND MUD. WAITING ON DST TOOLS @ 6AM.

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|------------------|
| CUMULATIVE MUD COST | <u>71,860</u> | CUMULATIVE DAILY COST | <u>1,092,256</u> | DRILLING REPRESENTATIVE | <u>SAS / RRA</u> |
| | | | | RIG PHONE NO. | |

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 60 CUM. ROTATING HRS. 3604-22to 80

L NO. DOE 85 - 18 FIELD BEAUMOUE CONTRACTOR RENT / # 7
 DEPTH 3208 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM _____ FT. TO _____ FT. IN _____ HRS. 1000# _____ WT. ON BIT _____ SPEED _____ RPM _____
 DRILLING SETUP Same

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM _____
 SIZE DEPTH
 PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.
 DRLG. FLUID BAROID MUD CO. 6 GL TYPE 8.9 PCF 40 SEC. 10 CPS
 YIELD PT. 6 #/100 SQ. FT. 15 CC WATER LOSS HT-HP WATER LOSS CC FILTER CAKE SOLIDS % SAND %
200 PPM % 40 PPM 8.0 ALK GALS (% MIN.) OTHER REMARKS
 CHLORIDE OIL CA pH

SURVEYS _____

DETAIL CIRC + COND MUD @ 2937'. WAIT ON DST TOOLS. P.D.H.
RIG UP AGAIN + SWEET. RAN TEMP. RECORDER FROM
1500' - 2935' (4 TIMES). PLUG DST TOOLS. RIH. SET
PACKER @ 2865' @ 5:30 AM, TAIL 2935'. MAKING
UP HEAD @ 6 AM.

MUD IN 140° MUD OUT 160°

CUMULATIVE MUD COST 72,310 CUMULATIVE DAILY COST 1,100,990 DRILLING REPRESENTATIVE SAS/RJA
 RIG PHONE NO. 702-635-5556

ONLY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 61 CUM. ROTATING HRS. 360 4/23 19 80

NO. DDE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|-------|------|-----------|
| DEPTH | <u>3208</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|---------------|--------------|--------|------------|------------------|-----------|--------------------|----------|---------------|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.5</u> | PCF | <u>32</u> | SEC. | <u>5</u> | CPS |
| YIELD PT. | <u>3</u> | #/100 SQ. FT. | <u>20</u> | CC | | HT-HP WATER LOSS | CC | <u>1/32</u> | <u>3</u> | % |
| CHLORIDE | <u>160</u> | PPM OIL | <u>20</u> CA | PPM pH | <u>8.0</u> | ALK | | FILTER CAKE SOLIDS | SAND | % |
| | | | | | | | | | | OTHER REMARKS |

SURVEYS _____

.. AIL M/U SURFACE LINES FOR DST. INSTALLED COIL TUBING UNIT. COIL TUBING STAGED IN TO 2500'. PUMPED NITROGEN THROUGH COIL TUBING. NITROGEN DISPLACED THEORETICAL RATHOLE VOLUME + FORMATION FLUID. WELL DID NOT FLOW WHEN NITRO. WAS SHUT OFF. TEST & SHUT IN @ SURFACE FOR 6 HRS. PULLED OUT COIL TUBING. EQUALIZED D.P. CIRC BOTTOMS UP. POH. 4/10 PACKER. REMOVED TEMP. + PRESS. CHARTS. RIG UP GEOTHERMAL TESTING SERVICES TO RUN TEMP SURVEYS @ 8AM

CUMULATIVE MUD COST 73,345 CUMULATIVE DAILY COST 6126,808 DRILLING REPRESENTATIVE BZ. / RJA

RIG PHONE NO. _____

ONLY PROGRESS OF DRILLING WELL. No-562

DRILLING DAYS 62 CUM. ROTATING HRS. 365 $\frac{1}{2}$ 4-24 19 80

| | | | | | | | | | | | | | | |
|--|-------------------|---------|-----------------|------------|----------------------------------|-----------|----------------------------------|------|-----------|-------|----------------------------------|------------|--------------|-----------|
| WELL NO. | <u>DOE 85- 18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI 7</u> | | | | | | | | | |
| DEPTH | <u>3281</u> | BIT NO. | <u>#13 (RR)</u> | SIZE | <u>8$\frac{3}{4}$</u> | MAKE-TYPE | <u>S3J</u> | FEET | <u>73</u> | HOURS | <u>5$\frac{1}{2}$</u> | JETS | <u>131/2</u> | ING. |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | | CONDITION |
| FROM | <u>3208</u> | FT. TO | <u>3281</u> | FT. | <u>73</u> | IN | <u>5$\frac{1}{2}$</u> | HRS. | <u>20</u> | 1000# | | WT. ON BIT | <u>60</u> | RPM |
| <u>DRILLING SETUP 8$\frac{3}{4}$" BIT, STAB, IDC, STAB, IDC, STAB, 4DC, STAB, 4DC, STAB</u> | | | | | | | | | | | | | | |

| | | | | | | | | | | |
|-------------|----------------------------------|----|-------------|-----------|--|-------------|------------|------|-----------|-----|
| LAST CASING | <u>9$\frac{5}{8}$</u> | AT | <u>2937</u> | FORMATION | | PUMP PRESS. | <u>900</u> | PSI@ | <u>49</u> | SPM |
| | SIZE | | DEPTH | | | | | | | |

| | | | | | | | | |
|-------------|--|-----|--------------|--|-----------------|-------------|--|----------|
| PUMP OUTPUT | | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | NOZZLE VEL. | | FT./SEC. |
|-------------|--|-----|--------------|--|-----------------|-------------|--|----------|

| | | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------|------------|------------------|---------------|--------|---------------|-----|-----------|---|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.9</u> | PCF | <u>46</u> | SEC. | <u>15</u> | CPS | | |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | | | |
| YIELD PT. | <u>9</u> | #/100 SQ. FT. | <u>14</u> | CC | | HT-HP WATER LOSS | <u>2 1/2</u> | CC | <u>4</u> | % | <u>14</u> | % |
| CHLORIDE | <u>200</u> | PPM | <u>40</u> | PPM | <u>9.6</u> | CA | FILTER CAKE | SOLIDS | SAND | | | |
| OIL | | | pH | | | ALK | GALS (% MIN.) | | | | | |

| | | |
|---------|--|---------------|
| SURVEYS | | OTHER REMARKS |
|---------|--|---------------|

DETAIL GEOTHERMAL TESTING SERVICE RAN TEMP. SURVEYS IN THE INTERVALS 2800'-3208' & 0'-3208'. RIG DOWN GTS. M/U BHA . RIH. DRLD F/ 3208 - 3281. POH TO CHANGE BITS @ 6AM.

CUMULATIVE
MUD COST 74,114

CUMULATIVE
DAILY COST 1,136,192

DRILLING REPRESENTATIVE BR./RJA

RIG PHONE NO. 702-635-5556

DAILY PROGRESS OF DRILLING WELLS

No. 562

DRILLING DAYS 63 CUM. ROTATING HRS. 377 1/4 4-25 19 80

NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI 7

DEPTH 3442 BIT NO. 14 SIZE 8 1/4" MAKE-TYPE S84F FEET 161 HOURS 12 JETS 13 1/2 CONDITION

| BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
|-------------|--------------------|------------|------------|-------------------|-----------|-------------------|
| <u>3281</u> | <u>FT. TO 3442</u> | <u>161</u> | <u>FT.</u> | <u>IN 12 HRS.</u> | <u>30</u> | <u>WT. ON BIT</u> |

DRILLING SETUP 8 1/4" BIT, STAB, MONEL, STAB, 1DC, STAB, 4DC, STAB,
5DC, STAB, 10JTS H.W., JATTS, 10JTS H.W.

LAST CASING 9 5/8 AT 2937 FORMATION PUMP PRESS. 1000 PSI@ 50 SPM

SIZE DEPTH

PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 8.9 WEIGHT PCF 47 SEC. 14 CPS
8 #/100 SQ. FT. 8 CC HT-HP WATER LOSS CC 2 1/2 FILTER CAKE 4 % SOLIDS 1/4 % SAND

200 PPM % 100 PPM 10.0 pH ALK GALS (% MIN.) OTHER REMARKS

CHLORIDE OIL CA

SURVEYS 3305 10 3427 10 15

AIL POH. CHANGED BITS, PLUG MONEL. RIH w/ BIT
14. BROKE CIRC @ 2000' & 2600'. DRILLED
8 1/4" HOLE FROM 3281-3305. SURVEYED. DRILLED
FROM 3305 - 3427. SURVEYED. DRILLED 3427-
3442 @ 6 AM.

CUMULATIVE MUD COST 74,626 CUMULATIVE DAILY COST 1,147,196 DRILLING REPRESENTATIVE BR / RJA
RIG PHONE NO. 702 - 635-5556

DAILY PROGRESS OF DRILLING WELLS 0-562

DRILLING DAYS 64 CUM. ROTATING HRS. 393 3/4 4-26 19 80

| | | | | | | | | | | | | | | |
|--|---------------------------|---------------|-----------------|--------------|------------------|------------------|-------------|---------------|---------------|---------------|---------------|------|------------|-----------------|
| L NO. | <u>DOE 85 - 18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI # 7</u> | | | | | | | | | |
| DEPTH | <u>3744</u> | BIT NO. | <u>14</u> | SIZE | <u>8 3/4"</u> | MAKE-TYPE | <u>S84F</u> | FEET | <u>463</u> | HOURS | <u>28 1/2</u> | JETS | <u>11</u> | CONDITION |
| FROM | <u>3442</u> | FT. TO | <u>3744 FT.</u> | SIZE | <u>302</u> | MAKE-TYPE | | FEET | <u>40</u> | HOURS | <u>16 1/2</u> | JETS | <u>11</u> | CONDITION |
| | | | | IN | | | | WT. ON BIT | | 1000# | | | <u>45</u> | RPM |
| DRILLING SETUP <u>8 3/4" BIT, STAB, MONEL, STAB, IDC, STAB, 4DC, STAB,</u> | | | | | | | | | | | | | | |
| <u>5DC, STAB, 10 KW, JARS, 10 KW.</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>9 5/8</u> | AT | <u>2937</u> | FORMATION | | PUMP PRESS. | <u>900</u> | PSI@ | <u>49</u> | SPM | | | | |
| SIZE | | DEPTH | | | | | | | | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | TYPE | <u>GEL</u> | WEIGHT | <u>9.0</u> | PCF | <u>44</u> | SEC. | <u>1/2</u> | CPS | | |
| YIELD PT. | <u>11</u> | #/100 SQ. FT. | <u>10</u> | CC | | HT-HP WATER LOSS | | CC | <u>2 1/32</u> | FUNNEL VISC. | <u>4</u> | % | <u>1/4</u> | % PLASTIC VISC. |
| CHLORIDE | <u>200</u> | PPM | <u>40</u> | PPM | <u>9.0</u> | ALK | | GALS (% MIN.) | | OTHER REMARKS | | | | |
| SURVEYS | <u>3427 - 1015 N 82 E</u> | | | | | | | | | | | | | |

...AIL DRLD. 8 3/4" HOLE 3442' - 3744'. RIG DOWN 5 HRS.FOR REPAIR ON PUMP. SURVEYING @ 6 AM.

| | | | | | |
|------------------------|---------------|--------------------------|------------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>75,226</u> | CUMULATIVE DAILY COST | <u>4,159,614</u> | DRILLING REPRESENTATIVE | <u>ZR/RJA</u> |
| | | | | RIG PHONE NO. | |

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 65 CUM. ROTATING HRS. 403 4-27 19 80

WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7
 DEPTH 3834 BIT NO. 14 SIZE 8 1/4 MAKE-TYPE 584F FEET 553 HOURS 37 3/4 JETS 12/31/3 8-8 - OUT
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 3744 FT. TO 3834 FT. 90 FT. IN 9 1/4 HRS. 30 1000# WT. ON BIT 45 SPEED RPM
 DRILLING SETUP SAME

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. 900 PSI@ 49 SPM
 SIZE DEPTH
 PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.
 DRLG. FLUID BAROID MUD CO. GEL TYPE WEIGHT 9.0 PCF 46 SEC. 16 CPS
9 #/100 SQ. FT. 8 CC WATER LOSS HT-HP WATER LOSS CC 2 1/2 FILTER CAKE 4 % SOLIDS 1/4 % PLASTIC VISC.
200 PPM 80 OIL % 80 PPM 9.5 pH ALK GALS (% MIN.) OTHER REMARKS
 CHLORIDE CA

SURVEYS _____

DETAIL DRILLED 8 1/4" HOLE 3744' - 3834'. WIPE HOLE.POH @ 6 AM.

CUMULATIVE MUD COST

75,970

CUMULATIVE DAILY COST

1,168,972

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 66 CUM. ROTATING HRS. 403 4-28 1980NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|-------------|---------|--------------|------|-----------|-------|-------|-------|-----------|
| DEPTH | <u>3834</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | <u>0</u> FT. | IN | HRS. | 1000# | | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 9510 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | |
|-------------|---------------|---------|------------------|------|--------|---------------|---------------|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | PCF | SEC. | CPS |
| | | | | | WEIGHT | FUNNEL VISC. | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | /32 | % | % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |
| OIL | | CA | | | | | |

SURVEYS _____

DETAIL POH. LOST 1 CORE & INSERTS IN HOLE. WAIT ON GEOTHERMAL TESTING SERVICE. RIG UP G.T.S. RAN TEMP. SURVEY 0-2900'. COULD NOT GET SURVEY TOOL DEEPER THAN 2900'. POH W/ SURVEY TOOL @ 6AM.

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>75,970</u> | CUMULATIVE DAILY COST | <u>1,185,791</u> | DRILLING REPRESENTATIVE | <u>BR/RJA</u> |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 67 CUM. ROTATING HRS. 403

4-29 19 80

NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | | | | | | | | |
|-------|-------------|---------|-----------|------|--------------|-----------|-------------|------|--|-------|-----------|------------|--|-----------|
| DEPTH | <u>3834</u> | BIT NO. | <u>15</u> | SIZE | <u>8 3/4</u> | MAKE-TYPE | <u>S44F</u> | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | 1000# | | WT. ON BIT | | RPM |

DRILLING SETUP 8 3/4 BIT, JUNK SUB, STAB, MONEL, STAB, 10C, STAB, 40C, STAB,
50C, STAB, 9 HUN., JARS, 11 HUN.

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | |
|-------------|---------------|---------------|---------------|--------|------------|------------------|---------------|--------------|---------------|-----|---|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.8</u> | PCF | <u>49</u> | SEC. | <u>18</u> | CPS | |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | | |
| YIELD PT. | <u>12</u> | #/100 SQ. FT. | <u>10</u> | CC | | HT-HP WATER LOSS | CC | <u>2 1/2</u> | <u>4</u> | % | % |
| CHLORIDE | <u>200</u> | PPM OIL | <u>160</u> CA | PPM pH | <u>9.5</u> | ALK | GALS (% MIN.) | | | | |

OTHER REMARKS
 SURVEYS _____

MAIL GTS. UNABLE TO RUN TEMP. SURVEY PAST 2900'. RIG DOWN GTS.
P/I U BIT # 15 & JUNK SUB. RIH. CHANGE OUT w/ NEW JARS.
BROKE CIRC. @ 1000'. RIH TO 2500'. CIRC. BOTTOMS UP. RIH
TO 3500'; CIRC. @ 6 AM.

MUD TEMP OUT 165°

IN 145°

CUMULATIVE MUD COST

76,677.

CUMULATIVE DAILY COST

1,203,030.

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 68 CUM. ROTATING HRS. 403

4-30

19 80

| | | | | | | | | | | | | | | | | |
|----------------|--|---------------|--------------|----------------|---------------|------------|-----------------|-----------------|------------------|---------------|--------------|-----------|-----------|-----------|---------------|-----------|
| L NO. | <u>DOE 85-18</u> | | FIELD | <u>BEOWAWE</u> | | CONTRACTOR | <u>KENAI #7</u> | | | | | | | | | |
| DEPTH | <u>3834</u> | BIT NO. | <u>15</u> | SIZE | <u>8 3/4"</u> | MAKE-TYPE | <u>S44F</u> | REAMED | <u>6</u> | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | WT. ON BIT | | 1000# | | SPEED | | RPM |
| DRILLING SETUP | <u>8 3/4" BIT, JUNK SUB, STAB, MONEL, STAB, IDC, STAB, 4DC, STAB, 5DC, STAB, 9HW., JARS, 11HW.</u> | | | | | | | | | | | | | | | |
| LAST CASING | SIZE | AT | DEPTH | FORMATION | | | | PUMP PRESS. | | | | PSI@ | | | | SPM |
| PUMP OUTPUT | GPM | | ANNULAR VEL. | | | | | FT./MIN. (D.P.) | NOZZLE VEL. | | | | | | FT./SEC. | |
| DRLG. FLUID | <u>BAROID</u> MUD CO. | | TYPE | <u>GEC</u> | | | | <u>9.0</u> | PCF | <u>50</u> | FUNNEL VISC. | <u>19</u> | SEC. | <u>19</u> | CPS | |
| | .2 | #/100 SQ. FT. | | <u>11</u> | CC | | | | HT-HP WATER LOSS | CC | <u>2 1/2</u> | SOLIDS | <u>4</u> | % | <u>0</u> | % |
| | <u>200</u> | PPM | % | <u>100</u> | PPM | <u>10.</u> | | ALK | | GALS (% MIN.) | | | | | OTHER REMARKS | |
| SURVEYS | | | | | | | | | | | | | | | | |

DETAIL REAMED F/ 3663'- 3826'. CIRC. RIG UP PRUETT WIRE-LINE
RAN 6 TEMP. SURVEYS F/ 2900'- 3810'. RIG DOWN PRUETT.
REAMED F/ 3826 - 3834 @ 6am.

CUMULATIVE
MUD COST

77,281

CUMULATIVE
DAILY COST

1,212,983

DRILLING REPRESENTATIVE

BR/RSA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELLS 6-562

DRILLING DAYS 169 CUM. ROTATING HRS. 403 5.1 1980

L NO. 85-18 D.O.E. FIELD BEOWAULE CONTRACTOR KENAI #7

DEPTH 3836 BIT NO. 15 894 SIZE 544F MAKE-TYPE 2 FEET HOURS 13.112 JETS 75 O.G. CONDITION

BIT NO. SIZE MAKE-TYPE FEET HOURS JETS CONDITION
FROM 3834 FT. TO 3836 FT. 2 IN HRS. 1000# WT. ON BIT SPEED RPM

DRILLING SETUP 8 3/4" BIT, JUNK SUB, STAB, MONEL STAB, 1-D.C. STAB, 4-D.C. STAB, 5-D.C. STAB, 9 H.W., JARS, 11-H.W.

LAST CASING 9 5/8 AT 2937 FORMATION PUMP PRESS. PSI@ SPM
SIZE DEPTH

PUMP OUTPUT GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 8.9 PCF 44 SEC. 15 CPS
YIELD PT. #/100 SQ. FT. 10 WATER LOSS CC HT-HP WATER LOSS CC FILTER CAKE SOLIDS % SAND %200 PPM % 160 PPM 9.5 pH ALK GALS (% MIN.) OTHER REMARKS
CHLORIDE OIL CA

SURVEYS

DETAIL COMPLETED REAMING FROM 3826' TO 3834' DRILL NEW HOLE TO 3836', WORK ON JUNK AT 3836' P.D.H. RETRIEVED MISCELLANEOUS JUNK OUT OF JUNK SUB. PICK UP MAGNET R.H. BRAKE CIRCULATION AT 1000' AND 2500', WORK MAGNET AT 3836' P.O.H. AT 6:AM.

CUMULATIVE MUD COST

77,712

CUMULATIVE DAILY COST

122,0120

DRILLING REPRESENTATIVE B.R.R./CF

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELLS J-562

DRILLING DAYS 70 CUM. ROTATING HRS. 41442 5-2 19 80

L NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | |
|--|-------------------------|-----------------------|-----------------------------|-----------------------------|---------------------|---------------------|-----------------|
| DEPTH <u>3964</u> | BIT NO. <u>16</u> | SIZE <u>8 1/4</u> | MAKE-TYPE <u>Sec M895</u> | FEET <u>128</u> | HOURS <u>11 1/2</u> | JETS <u>12/3/13</u> | CONDITION |
| BIT NO. _____ | | SIZE _____ | MAKE-TYPE _____ | FEET _____ | HOURS _____ | JETS _____ | CONDITION _____ |
| FROM <u>3836</u> | FT. TO <u>3964</u> FT. | <u>128</u> FT. | IN <u>11 1/2</u> HRS. | <u>45</u> | 1000# | <u>50</u> | RPM |
| WT. ON BIT | | | | | | | |
| DRILLING SETUP <u>8 1/4 BIT, JUNK SUB, STAB, MONEL, STAB, 1DC, STAB, 4DC,</u> <u>STAB, 5DC, STAB, 9 H.W., JARS, 10 H.W.</u> | | | | | | | |
| LAST CASING <u>9 5/8</u> AT <u>2937</u> FORMATION _____ | PUMP PRESS. _____ | PSI@ _____ | SPM | | | | |
| PUMP OUTPUT _____ GPM | ANNULAR VEL. _____ | FT./MIN. (D.P.) | NOZZLE VEL. _____ | FT./SEC. | | | |
| DRLG. FLUID <u>Barrow</u> MUD CO. <u>10</u> | TYPE <u>SEC</u> | WEIGHT <u>9.0</u> PCF | FUNNEL VISC. <u>45</u> SEC. | PLASTIC VISC. <u>17</u> CPS | | | |
| YIELD PT. <u>9</u> #/100 SQ. FT. | WATER LOSS <u>10</u> CC | HT-HP WATER LOSS CC | <u>2 1/2</u> FILTER CAKE | <u>4</u> % SOLIDS | <u>1/4</u> % SAND | | |
| CHLORIDE <u>200</u> PPM | OIL <u>%</u> | CA <u>PPM</u> | pH <u>9.8</u> | ALK | GALS (% MIN.) | | |
| SURVEYS <u>3940' 2° S 67 E</u> | | | | | | OTHER REMARKS | |

DETAIL FOUND A MAGNET. RECOVERED CONE FROM MAGNET &
MISC. JUNK FROM JUNK SUB. PLUG NEW BIT. RIH.
ZROKE CIRC. @ 1500' & 3000'. DRLD. 8 1/4" HOLE 3836'-
3946'. CIRC + SURVEYED. DRLD 3946'- 3964' @ 6MM.
DRLG. AREAAD.

CUMULATIVE MUD COST 78,552 CUMULATIVE DAILY COST 6,236, 175 DRILLING REPRESENTATIVE BR / RJA
 RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS 6-562

DRILLING DAYS 71 CUM. ROTATING HRS. 425

5-3

19 80

LL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| DEPTH | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
|-------|---------|------|-----------|------|-------|------|-----------|
|-------|---------|------|-----------|------|-------|------|-----------|

| | | | | | | |
|---------|------|-----------|------|-------|------|-----------|
| BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
|---------|------|-----------|------|-------|------|-----------|

FROM 3964 FT. TO 4039 FT. 75 FT. IN 10 1/2 HRS. 45 1000# 50 SPEED RPM

DRILLING SETUP 8 1/4" BIT, JUNK SUB, STAB, MONEL, STAB, DC, STAB, 4 DC, STAB,
5 DC, STAB, 9 HW. JARS, 11 HW.

LAST CASING 9 5/8 AT 2937 FORMATION 900 PUMP PRESS. 44 PSI@ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| DRLG. FLUID | MUD CO. | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. |
|-------------|---------|------|--------|-----|--------------|------|---------------|
|-------------|---------|------|--------|-----|--------------|------|---------------|

| | | | | | | | |
|------------|---------------|-------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | HT-HP WATER LOSS | CC | 2 1/2 | 4 | 1/4 |
| <u>8</u> | <u>10</u> | <u>15.3</u> | <u> </u> |
| <u>180</u> | <u>PPM</u> | <u>%</u> | <u>PPM</u> | <u>9.5</u> | <u> </u> | <u>SOLIDS</u> | <u>SAND</u> |
| CHLORIDE | OIL | CA | pH | ALK | GALS (% MIN.) | OTHER REMARKS | |

SURVEYS _____

DETAIL DRILLED 8 1/4" HOLE 3964-4039'. CIRC + POW @ 6MM
MUD TEMP IN 125° OUT 145°
COOLER ON

CUMULATIVE
MUD COST

79,341

CUMULATIVE
DAILY COST

1,257,248

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS 0-562

DRILLING DAYS 72 CUM. ROTATING HRS. 425 5-4 19 80

| | | | | | | | | | | | | | | | |
|----------------|--|---------------|-----------------|--------------|-----------------|------------------|-----------------|-------------|--------------|---------------|-----------|------------|---------------|-----------|--------------|
| WELL NO. | <u>DOE 85-18</u> | FIELD | <u>BEDWAGUE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | | | | |
| DEPTH | <u>4039</u> | BIT NO. | <u>16</u> | SIZE | <u>8 1/4"</u> | MAKE-TYPE | <u>Sec M89S</u> | FEET | <u>203</u> | HOURS | <u>22</u> | JETS | <u>13 1/2</u> | CONDITION | <u>5-3-J</u> |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | | CONDITION | |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | 1000# | | WT. ON BIT | | SPEED | |
| DRILLING SETUP | <u>8 1/4" BIT, JUNK, SUB, REAMER, LEAD COLLAR, STAB, MONEL, STEM, IDC, STAR, IDC, STEM, 2DC, STEM, 3DC, STEM, 3DC, STEM, 10MM, JAR, 10MM</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>9 5/8</u> | AT | <u>2937</u> | FORMATION | | PUMP PRESS. | | PSI@ | | SPM | | | | | |
| PUMP OUTPUT | | GPM | | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | | |
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | | TYPE | <u>Gel</u> | WEIGHT | <u>8.9</u> | PCF | <u>43</u> | SEC. | <u>15</u> | CPS | | | |
| | | | | | | HT-HP WATER LOSS | <u>16.8</u> | CC | | FUNNEL VISC. | | | | | |
| YIELD PT. | <u>9</u> | #/100 SQ. FT. | | WATER LOSS | <u>10.3</u> | CC | | | <u>2 1/2</u> | SOLIDS | <u>4</u> | % | <u>None</u> | % | |
| CHLORIDE | <u>160</u> | PPM | <u>40</u> | % | PPM | <u>9.0</u> | pH | ALK | | GALS (% MIN.) | | | | | |
| SURVEYS | | | | | | | | | | | | | | | |
| OTHER REMARKS | | | | | | | | | | | | | | | |

DETAL POH. LID JARS. (UNSCREWED IN BODY). POH 4/10 JUNK
SUB. L/D BENT MONEL. RIG DOWN 5 HRS (DRAWWORKS
MOTOR). W/O NEW JARS + MONEL. MU BHA. RIH TO 2500'.
CIRC. RIH @ 6MM

| | | | | | |
|------------------------|---------------|--------------------------|-----------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>79,341</u> | CUMULATIVE DAILY COST | <u>1263,620</u> | DRILLING REPRESENTATIVE | <u>BR/RJA</u> |
| RIG PHONE NO. _____ | | | | | |

DAILY PROGRESS OF DRILLING WELLS -562

DRILLING DAYS 73 CUM. ROTATING HRS. 447 5-5 18 80

L NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7
 DEPTH 4128 BIT NO. 17 SIZE 8 1/4 MAKE-TYPE SMITH FG FEET 89 HOURS 20 JETS 11 JDC.
 CONDITION
 BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____
 FROM 4039 FT. TO 4128 FT. 89 FT. IN 20 HRS. 45 WT. ON BIT 1000# SPEED 45 RPM
 DRILLING SETUP SAME

LAST CASING 9 5/8 AT 2937 FORMATION VACUUM PUMP PRESS. 900 PSI@ 44 SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | |
|---------------------------|--------------------------|----------------------|----------------------------|--------------------------|-----------------------|-----------------------|
| DRLG. FLUID <u>BANOLD</u> | MUD CO. <u></u> | TYPE <u>GEL</u> | WEIGHT <u>9.2</u> PCF | FUNNEL VISC. <u>50</u> | SEC. <u>11</u> | CPS <u></u> |
| YIELD PT. <u>12</u> | #/100 SQ. FT. <u>7.8</u> | WATER LOSS <u>CC</u> | HT-HP WATER LOSS <u>CC</u> | FILTER CAKE <u>2 132</u> | SOLIDS <u>7</u> % | SAND <u>64</u> % |
| CHLORIDE <u>200</u> PPM | OIL <u>%</u> | CA <u>60</u> PPM | pH <u>10.0</u> | ALK <u></u> | GALS (% MIN.) <u></u> | OTHER REMARKS <u></u> |

SURVEYS _____

DETAIL RIH TO 3836'. ENCOUNTERED TIGHT HOLE. CIRC. + COND.
MUD. REAMED 3836' - 4039'. DRILLED 8 1/4" HOLE 4039 -
4128 @ 6 am.

MUD IN 123° OUT 154°

COOLER ON

CUMULATIVE
MUD COST80,946CUMULATIVE
DAILY COST1,248,073DRILLING REPRESENTATIVE SAS / RJA

RIG PHONE NO. _____

OIL PROGRESS OF DRILLING WELLS

DRILLING DAYS 74 CUM. ROTATING HRS. 162 1/2 5-6 19 80

L NO. DOE 85-18 FIELD BEDAWIE CONTRACTOR KENAI #7
 DEPTH 4224 BIT NO. 17 SIZE 8 3/4 MAKE-TYPE SMITH FC 185 FEET 356 MMHg 7-58-5182
 BIT NO. 18 SIZE 8 3/4 MAKE-TYPE See M 87F FEET 156 HOURS 45 JETS 11 CONDITION
 FROM 4128 FT. TO 4224 FT. 76 FT. IN 156 HRS. 45 1000# 45 SPEED RPM
 DRILLING SETUP SAME

LAST CASING 950 AT 2937 FORMATION VACUUM PUMP PRESS. 900 PSI@ 44 SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | |
|---------------------------|------------------------|-----------------------|-----------------------------|-----------------|-----------------------------------|
| DRLG. FLUID <u>BPROID</u> | MUD CO. <u>62C</u> | TYPE <u>9.2</u> | PCF <u>44</u> | SEC. <u>16</u> | CPS |
| YIELD PT. <u>5</u> | #/100 SQ. FT. <u>6</u> | CC <u>13.8</u> | FUNNEL VISC. <u>2 1/2</u> | SOLIDS <u>7</u> | % PLASTIC VISC. <u>1/4</u> % SAND |
| CHLORIDE <u>160</u> | PPM <u>90</u> | WATER LOSS <u>9.0</u> | HT-HP WATER LOSS <u>ALK</u> | GALS (% MIN.) | OTHER REMARKS |
| OIL | CA | pH | | | |

SURVEYS _____

DETAIL DRILLED 8 3/4" HOLE 4128'-4224'; POH. CHANGED BITS.

REPAIRED RIG 2 HRS. RIH @ 6MM.

CUMULATIVE
MUD COST

86,406

CUMULATIVE
DAILY COST

1,290,971

DRILLING REPRESENTATIVE

SAS / RJA

RIG PHONE NO.

DRILLING PROGRESS OF DRILLING WELLS No-562

DRILLING DAYS 75 CUM. ROTATING HRS. 479 1/2 5-7 19 80

| | | | | | |
|----------------|------------------|---------|----------------|------------|---------------------|
| WELL NO. | <u>DDE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> |
| DEPTH | <u>4400</u> | BIT NO. | <u>18</u> | SIZE | <u>8 3/4</u> |
| | | | | MAKE-TYPE | <u>SEC M89F 176</u> |
| | | | | FEET | <u>17</u> |
| | | | | HOURS | <u>17</u> |
| | | | | JETS | <u>16</u> |
| | | | | CONDITION | <u>HAZ</u> |
| FROM | <u>4224</u> | FT. TO | <u>4400</u> | FT. | <u>176</u> |
| | | | | IN | <u>17</u> |
| | | | | hrs. | <u>30-35</u> |
| | | | | WT. ON BIT | <u>1000*</u> |
| | | | | SPEED | <u>45</u> |
| DRILLING SETUP | <u>same</u> | | | | |

LAST CASING 9 1/2 AT 2937 FORMATION Valley PUMP PRESS. 1000 PSI@ 52 SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|---------------|---------------|---------------|------------|------|-------------|---------------|---------------|----------|-----------|--------------|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>GEL</u> | TYPE | <u>9.2</u> | PCF | <u>45</u> | SEC. | <u>15</u> | CPS |
| | | | | | WEIGHT | | FUNNEL VISC. | | | |
| YIELD PT. | <u>6</u> | #/100 SQ. FT. | <u>6.8</u> | CC | <u>13.9</u> | CC | <u>2 1/32</u> | <u>7</u> | % | <u>1/4</u> % |
| CHLORIDE | <u>160</u> | PPM | <u>80</u> | PPM | <u>8.9</u> | | FILTER CAKE | SOLIDS | | |
| OIL | | CA | pH | ALK | | GALS (% MIN.) | | | | |
| OTHER REMARKS | | | | | | | | | | |

SURVEYS _____

DETAIL RH. CIRC. @ 2800'. RH TO 4224'. WORKED JUNK
SUB. DRLD. 8 3/4" HOLE F/ 4224- 4400' @ 6AM.

MYO IN 120° OUT 148
COOLER ON.

CUMULATIVE
MUD COST

81,586

CUMULATIVE
DAILY COST

1,299,857

DRILLING REPRESENTATIVE

SAS/RJA

RIG PHONE NO.

DAILY PROGRESS OF DRILLING WELL No. 562

DRILLING DAYS 76 CUM. ROTATING HRS. 4915-819 80

| | | | | | | | | | | | | | | |
|---|------------------|---------|----------------|--------------|-----------------|------------------|---------------------|--------------|---------------|---------------|----------------|------|-----------|-----------|
| L NO. | <u>DOE 85-18</u> | FIELD | <u>BEOWAWE</u> | CONTRACTOR | <u>KENAI #7</u> | | | | | | | | | |
| DEPTH | <u>4543'</u> | BIT NO. | <u>18</u> | SIZE | <u>8 1/4</u> | MAKE-TYPE | <u>SECM 89F 319</u> | FEET | <u>28 1/2</u> | HOURS | <u>16 1/16</u> | JETS | <u>11</u> | CONDITION |
| FROM | <u>4400</u> | FT. TO | <u>4543</u> | FT. | <u>143</u> | IN | <u>1 1/2</u> | hrs. | <u>30-35</u> | WT. ON BIT | <u>1000#</u> | JETS | <u>45</u> | RPM |
| DRILLING SETUP <u>8 1/4" BIT, JUNK SUB, 3PT REAMER, LENO COLLAR, STAB, MULL, STAB, IDC, STAB, IDC, STAB, 2DC, STAB, 3DC, STAB, 3DC, STAB, 10JT H.W., JARS, 10MA</u> | | | | | | | | | | | | | | |
| LAST CASING | <u>9 5/8</u> | AT | <u>2937</u> | FORMATION | <u>Valmy</u> | PUMP PRESS. | <u>900</u> | PSI@ | <u>44</u> | SPM | | | | |
| PUMP OUTPUT | | | GPM | ANNULAR VEL. | | FT./MIN. (D.P.) | | NOZZLE VEL. | | FT./SEC. | | | | |
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | | <u>Gel</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | | | | |
| YIELD PT. | #/100 SQ. FT. | | | WATER LOSS | CC | HT-HP WATER LOSS | CC | 132 | % | % | | | | |
| CHLORIDE | PPM | % | CA | PPM | pH | ALK | GALS (% MIN.) | SOLIDS | SAND | | | | | |
| SURVEYS | | | | | | | | | | OTHER REMARKS | | | | |

TAIL DELD. 8 1/4" HOLE F/4400 = 4543' CIRC. BOTTOMS UP.
RIG UP PRUETT WIRELINE FOR TEMP. SURVEY. RUNNING
TEMP. SURVEYS @ GAM.

CUMULATIVE
MUD COST82,120CUMULATIVE
DAILY COST1,310,689

DRILLING REPRESENTATIVE

BR/RJA

RIG PHONE NO.

OIL PROGRESS OF DRILLING WELL No-562

DRILLING DAYS 77 CUM. ROTATING HRS. 4915/91980L NO. DOE 85-18 FIELD BEDOUINE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|------------|-------|-----------|
| DEPTH | <u>4543</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | SPEED | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION Valley PUMP PRESS. 800 PSI@ 45 SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------------|------------|------------------|-----------|-------------|-----------|--------------|---------------|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.9</u> | WEIGHT | <u>43</u> | PCF | <u>18</u> | SEC. | CPS |
| YIELD PT. | <u>7</u> | #/100 SQ. FT. | <u>8</u> | WATER LOSS | CC | HT-HP WATER LOSS | <u>2</u> | CC | <u>32</u> | FUNNEL VISC. | PLASTIC VISC. |
| CHLORIDE | <u>160</u> | PPM | % | PPM | <u>9.1</u> | pH | ALK | GALS (MIN.) | SOLIDS | % | SAND |
| OIL | CA | | | | | | | | | | OTHER REMARKS |

SURVEYS _____

DETAIL COMPLETED TEMP. SURVEY. RIG DOWN PRUITT.
WIPED HOLE TO SHOE. BROKE CIRC @ 2900'. RIH TO
4540' & CIRC. WAITING ON SCHLUMBERGER FOR LOGS
@ 6AM.

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>82,561</u> | CUMULATIVE DAILY COST | <u>1,328,669</u> | DRILLING REPRESENTATIVE | <u>BR/RJH</u> |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|

RIG PHONE NO. _____

OILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 78 CUM. ROTATING HRS. 491 5-10 19 80

- NO. D.D.E. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

| | | | | | | | |
|--------------------|--------------|------|-----------|------------|------------|-------|-----------|
| DEPTH <u>4543'</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM _____ | FT. TO _____ | FT. | IN _____ | HRS. _____ | WT. ON BIT | 1000# | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION VALMY PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|--------------------------------------|-----------------|------------|-----|------------------|-----|--------------|---------------|---------------|------|---|
| DRLG. FLUID <u>BAROID</u> MUD CO. | TYPE <u>GEL</u> | WEIGHT | PCF | SEC. | CPS | | | | | |
| YIELD PT. | */100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | FUNNEL VISC. | SOLIDS | % | SAND | % |
| CHLORIDE | PPM | OIL % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | |

SURVEYS _____

TAI WAIT ON SCHLUMBERGER, RIG UP LOGGERS RUN TEMP. SURVEY
RUNNING DIFFL / SP AT 6:AM.

CUMULATIVE MUD COST 82561 CUMULATIVE DAILY COST 1,337,366 DRILLING REPRESENTATIVE BRR/LC

RIG PHONE NO. _____

OILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 79 CUM. ROTATING HRS. 491 5-11 1980

WELL NO. D.O.E 85-18 FIELD BEOWAWE CONTRACTOR KENAI # 7

| | | | | | | | |
|-------------------|--------------|------|-----------|------------|-------|------------|-----------|
| DEPTH <u>4543</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM _____ | FT. TO _____ | FT. | IN _____ | HRS. _____ | 1000# | WT. ON BIT | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | |
|--------------------------------------|--------------------|--------|------------------|--------------|------|---------------|---------------|---|
| DRLG. FLUID <u>BARDID</u> MUD CO. | <u>GEL</u> TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS | |
| YIELD PT. | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | /32 | SOLIDS | % | % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | |
| OIL | CA | | | | | | | |

SURVEYS _____

DETAIL COMPLETED DIFFL, RAN TEMP SURVEY, RAN C.B.L., SONIC LOG,
LOGGING AT 10:AM

| | | |
|-----------------------------------|--|---------------------------------------|
| CUMULATIVE MUD COST <u>82,561</u> | CUMULATIVE DAILY COST <u>1,346,365</u> | DRILLING REPRESENTATIVE <u>BRR/cf</u> |
|-----------------------------------|--|---------------------------------------|

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 80 CUM. ROTATING HRS. 4915-12 19 80WT. NO. D.D.E. 85-18 FIELD BEDWAUIE CONTRACTOR KENAI 7DEPTH 4543 BIT NO. 19 SIZE 8 3/4 MAKE-TYPE STC F5 FEET FEET HOURS JETS CONDITION

BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____

FROM _____ FT. TO _____ FT. FT. IN HRS. 1000# WT. ON BIT SPEED RPM

DRILLING SETUP 8 3/4" BIT, JUNK SUB, 3-POINT REAMER, LEAD COLLAR, STAB, MONEL STAB, 1 DCSTAB, 2-DC STAB, 2-DC STAB, 2-DC STAB, 1D-H.W., JARS, 1D HW.LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BARDOL MUD CO. GEL TYPE WEIGHT PCF FUNNEL VISC. SEC. PLASTIC VISC. CPS

YIELD PT. #/100 SQ. FT. WATER LOSS CC HT+HP WATER LOSS CC FILTER CAKE % SOLIDS % SAND %

CHLORIDE PPM % OIL PPM CA pH ALK GALS (% MIN.) OTHER REMARKS

SURVEYS _____

BAW DIP METER WITH TEMP SURVEY, RAN FDC, CNL, GR WITH TEMP SURVEY RIG DOWN LOGGERS. PICK UP NEW BIT R.H. AT BAWMULATIVE
MUD COST82 847CUMULATIVE
DAILY COST1355.062DRILLING REPRESENTATIVE BRR/CE

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 81 CUM. ROTATING HRS. 5055-13- 1980L NO. D.O.E. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7DEPTH 4653 BIT NO. 19 SIZE 8 3/4 MAKE-TYPE STC F5 FEET 110 HOURS 14 JETS 16/16/16 CONDITIONBIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS 11 CONDITIONFROM 4543 FT. TO 4653 FT. 110 FT. IN 14 HRS. 35 WT. ON BIT 1000# 45-50 SPEED RPM

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 8.9 PCF 43 SEC. 16 CPS
WEIGHT FUNNEL VISC. PLASTIC VISC.

| | | | | | | | | | |
|------------|---------------|------------|-----|------------------|----|---------------|--------|------------|---|
| <u>6</u> | #/100 SQ. FT. | <u>9</u> | CC | <u>17.1</u> | CC | <u>2 1/2</u> | SOLIDS | <u>4</u> % | % |
| YIELD PT. | | WATER LOSS | | HT-HP WATER LOSS | | FILTER CAKE | | SAND | |
| <u>150</u> | PPM | <u>40</u> | PPM | <u>9.0</u> | | | | | |
| CHLORIDE | OIL | CA | pH | ALK | | GALS (% MIN.) | | | |

OTHER REMARKS _____ SURVEYS _____

MAIL R.I.H. BRAKE CIRCULATION AT 1500', 2900', 3700', 4540'

DRILL 8 3/4" HOLE FROM 4543' TO 4653' DRILLING AHEAD AT

6AM

CUMULATIVE MUD COST 83,499 CUMULATIVE DAILY COST 1,415.697 DRILLING REPRESENTATIVE BILL/CF

RIG PHONE NO. _____

PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 82 CUM. ROTATING HRS. 5295-14 19 80ELL NO. D.O.E. 85-18 FIELD BEOWUAWE CONTRACTOR KENAI 7DEPTH 4849 BIT NO. 19 SIZE 8 1/4 MAKE-TYPE STC F5 FEET 306 HOURS 38 JETS 16/16/16 CONDITIONBIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS 11 CONDITIONFROM 4653 FT. TO 4849 FT. 196 FT. IN 24 HRS. 35 WT. ON BIT 1000# SPEED 45-50 RPMDRILLING SETUP 8 1/4 bit, Junk sub, 3 point reamer, lead collar stab, mone / stab, 1-DC stab, 1-DC stab, 2 DC, stab, 2 DC, stab, 2 DC stab, 10-HW, Jars, 10 HW,LAST CASING 9 5/8 AT 2937 FORMATION Valmy PUMP PRESS. _____ PSI@ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 8.9 PCF 48 SEC. 18 CPS PLASTIC VISC.YIELD PT. 8 #/100 SQ. FT. 6.8 CC WATER LOSS 14.1 CC HT+HP WATER LOSS 2 1/2 FILTER CAKE 4 % SOLIDS 4 % SAND 4 %CHLORIDE 160 PPM OIL 60 PPM CA 9.2 pH ALK GALS (% MIN.) OTHER REMARKS

SURVEYS _____

DETAIL Drill 8 1/4 hole from 4653' to 4849' drilling ahead at 6 AMCUMULATIVE MUD COST 83,880 CUMULATIVE DAILY COST 1,425,844 DRILLING REPRESENTATIVE BRIANRIG PHONE NO. 702

DAILY PROGRESS OF DRILLING WELL Pto-562

DRILLING DAYS 83 CUM. ROTATING HRS. 540

5-15 19 80

WELL NO. D.O.E. 85-18 FIELD BFOWAWJE CONTRACTOR KENAI # 7

DEPTH 4985 BIT NO. 19 SIZE 8 3/4 MAKE-TYPE STC F5 FEET 317 HOURS 39 1/2 JETS 16/16/16 6-5 TG CONDITION

BIT NO. 20 SIZE 8 3/4 MAKE-TYPE STC 74 FEET 125 HOURS 9 JETS 16/16/16 CONDITION

FROM 4849 FT. TO 4985 FT. 136 FT. IN 10 1/2 HRS. 3.5 1000# 45-50 RPM WT. ON BIT SPEED

DRILLING SETUP 8 3/4 bit, junk sub, 3pt. reamer, lead collar, stab, monel, stab, 1-D.C., stab, 1-D.C., stab, 2-D.C., stab, 2-D.C., stab, 2-D.C., stab, 10 HW, jars, 10 HW.

LAST CASING 9 5/8 AT 2937' FORMATION Valmy PUMP PRESS. 800 PSIG 52 SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. Gel TYPE 8.9 PCF 41 SEC. 15 CPS PLASTIC VISC.

7 #/100 SQ. FT. 6.6 CC 13.9 CC 2.02 FILTER CAKE 4 % SOLIDS NIL % SAND

YIELD PT. WATER LOSS HT-HP WATER LOSS FILTER CAKE % SOLIDS SAND

PPM 80 PPM 9.5 ALK GALS (% MIN.) OTHER REMARKS

CHLORIDE OIL CA pH SURVEYS 4945' N 32E 2° 45'

DETAIL DRILL 8 3/4" HOLE FROM 4849 TO 4860' CIRCULATE P.D.H.

CHANGE BITS. STAGE IN HOLE AT 2900, 3900, 4860'; DRILL

8 3/4" HOLE FROM 4860 TO 4985' DRILLING A HEAD AT 6 A.M.

CUMULATIVE MUD COST 84483

CUMULATIVE DAILY COST 1442.076

DRILLING REPRESENTATIVE BRR/CF

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 84 CUM. ROTATING HRS. 555

5-16 1980

| | | | | | |
|----------|---------------------|---------|-----------------|------------|------------------|
| WELL NO. | <u>D.D.E. 85-18</u> | FIELD | <u>BEDWALVE</u> | CONTRACTOR | <u>KENAI #7</u> |
| DEPTH | <u>5111</u> | BIT NO. | <u>20</u> | SIZE | <u>8 3/4"</u> |
| | | | | MAKE-TYPE | <u>STC FA</u> |
| | | | | FEET | <u>251</u> |
| | | | | HOURS | <u>23</u> |
| | | | | JETS | <u>16/16</u> |
| | | | | CONDITION | <u>3-7 E</u> |
| | | BIT NO. | <u>21</u> | SIZE | <u>8 3/4"</u> |
| | | | | MAKE-TYPE | <u>STC FS</u> |
| | | | | FEET | <u>40</u> |
| | | | | HOURS | <u>11</u> |
| | | | | JETS | <u>11</u> |
| FROM | <u>4985</u> | FT. TO | <u>5111</u> | FT. | <u>126</u> FT. |
| | | | | IN | <u>14</u> HRS. |
| | | | | WT. ON BIT | <u>3.5</u> |
| | | | | 1000# | <u>45-50</u> RPM |
| | | | | SPEED | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | | | |
|-------------|---------------|---------------|-------------------|------|-------------|--------|----------------------|--------------|------------|----------|------------|--------|
| DRLG. FLUID | <u>BARDID</u> | MUD CO. | <u>GEL</u> | TYPE | <u>8.9</u> | WEIGHT | <u>4.0</u> | PCF | <u>4.0</u> | SEC. | <u>14</u> | CPS |
| | | | | | | | | FUNNEL VISC. | | | | |
| | | | | | | | | | | | | |
| | <u>7</u> | */100 SQ. FT. | <u>7.5</u> | CC | <u>14.8</u> | CC | <u>2.32</u> | FILTER CAKE | <u>4</u> | % SOLIDS | <u>711</u> | % SAND |
| | | | | | | | | | | | | |
| | <u>160</u> | PPM OIL | <u>8.0</u> PPM CA | pH | <u>9.5</u> | ALK | <u>GALS (% MIN.)</u> | | | | | |
| | | | | | | | | | | | | |

OTHER REMARKS SURVEYS _____

DETAIL 8 3/4 HOLE 4985 - 5111 CIRCULATE R.C.H. CHANGE KIT

R.I.H. SERVICE DRILL COLLARS R.I.H. AT 60MM

CUMULATIVE
MUD COST

85050

CUMULATIVE
DAILY COST

1453.077

DRILLING REPRESENTATIVE BRR/CF

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 85 CUM. ROTATING HRS. 3555-17 19 80WELL NO. D.D.E. 85-18 FIELD BEOWAUE CONTRACTOR KENDAI 7

| | | | | | | | | | | | | | | |
|-------|------------|---------|-----------|------|--------------|-----------|-----------------|------|--------------|-------|-----------|------|-----|-----------|
| DEPTH | <u>511</u> | BIT NO. | <u>21</u> | SIZE | <u>8 3/4</u> | MAKE-TYPE | <u>SMITH FS</u> | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | HRS. | <u>1000#</u> | | SPEED | | RPM | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|--------|---------------|--------------|--------|-----|---------------|
| DRLG. FLUID | <u>BARDID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | /32 | FILTER CAKE | SOLIDS | % | SAND |
| CHLORIDE | PPM | OIL | CA | pH | ALK | GALS (% MIN.) | | | | |

SURVEYS _____ OTHER REMARKS _____

DETAIL R.H. TO 500' RIG DOWN FOR REPAIR TO DRAW WORKSCLUTCH REPAIR. R.I.H. TO 2000' RIG DOWN FOR REPAIRS TOCLUTCH. RIG DOWN AT 6:AMCUMULATIVE MUD COST \$5,050 CUMULATIVE DAILY COST 1,457,884 DRILLING REPRESENTATIVE BRK/CJRIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 86 CUM. ROTATING HRS. 555 5-18 19 80

WELL NO. D.O.E. 85-18 FIELD BEDWALIE CONTRACTOR KENAI 7

| | | | | | | | | | | | | | |
|-------|-------------|---------|-----------|------|--------------|-----------|---------------|------|--|-------|-----------|-------|-----------|
| DEPTH | <u>5111</u> | BIT NO. | <u>21</u> | SIZE | <u>8 1/8</u> | MAKE-TYPE | <u>STC FS</u> | FEET | | HOURS | <u>11</u> | JETS | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | <u>11</u> | JETS | CONDITION |
| FROM | | FT. TO | | FT. | | IN | | HRS. | | 1000# | | SPEED | |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|-----------------|---------|------------|------|------------------|-----|---------------|---------------|---------------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | PLASTIC VISC. | CPS |
| YIELD PT. | gal/100 SQ. FT. | CC | WATER LOSS | CC | HT-HP WATER LOSS | CC | FILTER CAKE | % SOLIDS | % SAND | % |
| CHLORIDE | PPM | % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | |

SURVEYS _____

DETAIL RIG DOWN 24 HRS FOR CLUTCH REPAIR.

CUMULATIVE MUD COST 85,050 CUMULATIVE DAILY COST 146,0549 DRILLING REPRESENTATIVE B.R.R./CF

RIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 87 CUM. ROTATING HRS. 555

5-19-1980

WELL NO. D.O.E 85-18 FIELD BEDOUAWE CONTRACTOR KENAI 7

| | | | | | | | |
|-------------------|-------------------|-------------------|-------------------------|------|-------|-------|-----------|
| DEPTH <u>5111</u> | BIT NO. <u>21</u> | SIZE <u>8 3/4</u> | MAKE-TYPE <u>STC FS</u> | FEET | HOURS | JETS | CONDITION |
| | | | | | | | |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | FT. TO | FT. | IN | HRS. | 1000# | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | |
|---------------------------------------|-----------------|--------|------------------|---------------|---------------|---------------|
| DRILG. FLUID <u>BAROID</u> MUD CO. | TYPE <u>Gel</u> | PCF | SEC. | CPS | | |
| | | WEIGHT | FUNNEL VISC. | PLASTIC VISC. | | |
| YIELD PT. | #/100 SQ. FT. | CC | CC | % | | |
| | WATER LOSS | | HT-HP WATER LOSS | SOLIDS | | |
| CHLORIDE | PPM OIL | PPM CA | pH | PPM ALK | GALS (% MIN.) | OTHER REMARKS |

SURVEYS _____

DETAIL BIG DOWN 24 HRS REPAIRING DRAW WORKS.

CUMULATIVE MUD COST 851050 CUMULATIVE DAILY COST 14441092 DRILLING REPRESENTATIVE B.R.R./CF

RIG PHONE NO. 702 635-5556

DAILY PROGRESS OF DRILLING WELLS #10-562

DRILLING DAYS 88 CUM. ROTATING HRS. 555

5-20 1980

WELL NO. D.O.E 85-18 FIELD BEDUWALIE CONTRACTOR KENAI 7

| | | | | | | | | | | | | | | |
|-------|-------------|---------|-----------|------|--------------|-----------|---------------|------|--|-------|-----------|------|--|-----------|
| DEPTH | <u>5111</u> | BIT NO. | <u>21</u> | SIZE | <u>8 3/4</u> | MAKE-TYPE | <u>STC F5</u> | FEET | | HOURS | <u>11</u> | JETS | | CONDITION |
|-------|-------------|---------|-----------|------|--------------|-----------|---------------|------|--|-------|-----------|------|--|-----------|

| | | | | | | | | | | | | |
|---------|--|------|--|-----------|--|------|--|-------|--|------|--|-----------|
| BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | | CONDITION |
|---------|--|------|--|-----------|--|------|--|-------|--|------|--|-----------|

| | | | | | | | | | | | | | |
|------|--|--------|--|-----|--|----|--|------|--------------|------------|--|-------|-----|
| FROM | | FT. TO | | FT. | | IN | | HRS. | <u>1000*</u> | WT. ON BIT | | SPEED | RPM |
|------|--|--------|--|-----|--|----|--|------|--------------|------------|--|-------|-----|

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG _____ SPM

SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRILL. FLUID BARDID MUD CO. GEL TYPE PCF WEIGHT FUNNEL VISC. SEC. CPS PLASTIC VISC.

| | | | | | | | | |
|-----------|---------------|----|------------------|----|-----|--------|---|---|
| YIELD PT. | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | /32 | SOLIDS | % | % |
|-----------|---------------|----|------------------|----|-----|--------|---|---|

| | | | | | | | | |
|----------|-----|---|----|-----|----|-----|---------------|---------------|
| CHLORIDE | PPM | % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |
|----------|-----|---|----|-----|----|-----|---------------|---------------|

SURVEYS _____

DETAIL RIG DOWN 19 HRS. REPAIRING DRAWWORKS CLUTCH. P.D.H.

SERVICING DRILL PIPE HEAVY WEIGHT AND DRILL COLLARS AT 6:AM.

CUMULATIVE
MUD COST 85,050

CUMULATIVE
DAILY COST 1,467.92

DRILLING REPRESENTATIVE B.R.R / RJA

RIG PHONE NO. 702

DAILY PROGRESS OF DRILLING WELLS Pre-562

DRILLING DAYS 89 CUM. ROTATING HRS. 570 5-21 ¹⁹ 80

WELL NO. D.D.F. 85-18 FIELD BEOWAWE CONTRACTOR KENAI #7

DEPTH 5227 BIT NO. 21 SIZE 8 3/4 MAKE-TYPE SMITH FS FEET 116 HOURS 15 JETS 16 11/11 CONDITION

BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS 11 CONDITION

FROM 5111 FT. TO 5227 FT. 116 FT. IN 15 HRS. 25 WT. ON BIT 1000# SPEED 45-50 RPM

DRILLING SETUP 8 3/4" BIT, JUNKSUB, 3PT. REAMER, LEAD COLLAR, STAR, MONFL, STAR, 1-D.C., STAB, 1-D.C. STAB, 2 DC, STAB, 2-D.C., STAB, 2 D.C. STAB, 10 ft. H.W. JARS, 10-H.W.

LAST CASING 7 5/8 AT 2937 FORMATION _____ PUMP PRESS. 800 PSIG 52 RPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 9.0 WEIGHT PCF 40 FUNNEL VISC. SEC. 13 CPS PLASTIC VISC.

6 #/100 SQ. FT. 6.7 CC 14.2 CC FILTER CAKE 2 m 4 % SAND

160 PPM CHLORIDE OIL % 100 PPM CA 9.1 pH ALK GALS (% MIN.) OTHER REMARKS

SURVEYS _____

DETAIL TEST B.O.P.E. R.I.H. CIRCULATE AT 3000'; 4000' 4500' 5111: DRILL 8 3/4" HOLE FROM 5111 - 5227 DRILLING AHEAD AT 6 AM

MUD TEMP IN 140° OUT 185°

CODLER ON

CUMULATIVE
MUD COST

25,954

CUMULATIVE
DAILY COST

1,478,360

DRILLING REPRESENTATIVE BRR/CE

RIG PHONE NO. _____

ONLY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 90 CUM. ROTATING HRS. 577 5-22 1980WELL NO. D.O.E. 85-18 FIELD BEOWAWE CONTRACTOR KENAI 7

| | | | | | | | | | | | | | | |
|-------|-------------|---------|-----------------|------|--------------|-----------|---------------|----------|------------|-----------|-----------|--------------|--------------|-----------|
| DEPTH | <u>5318</u> | BIT NO. | <u>21</u> | SIZE | <u>8 3/4</u> | MAKE-TYPE | <u>STC F5</u> | FEET | <u>207</u> | HOURS | <u>22</u> | JETS | <u>KV616</u> | CONDITION |
| FROM | <u>5222</u> | FT. TO | <u>5318</u> FT. | IN | <u>91</u> | FT. | IN | <u>7</u> | HRS. | <u>35</u> | 1000# | <u>45-50</u> | RPM | |

DRILLING SETUP _____

| | | | | | | | | | | |
|-------------|--------------|-------|-------------|-----------|-------|-------------|-------|------|-------|-----|
| LAST CASING | <u>9 5/8</u> | AT | <u>2937</u> | FORMATION | _____ | PUMP PRESS. | _____ | PSI@ | _____ | SPM |
| SIZE | | DEPTH | | | | | | | | |

| | | | | | |
|-------------|-----------|--------------|-----------------------|-------------|----------------|
| PUMP OUTPUT | _____ GPM | ANNULAR VEL. | _____ FT./MIN. (D.P.) | NOZZLE VEL. | _____ FT./SEC. |
|-------------|-----------|--------------|-----------------------|-------------|----------------|

| | | | | | | | | | | | |
|-------------|---------------|---------------|------------|------|-------------|------------------|--------------|--------------|--------|------------|-----|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>Gel</u> | TYPE | <u>9.1</u> | WEIGHT | <u>43</u> | PCF | SEC. | <u>19</u> | CPS |
| YIELD PT. | <u>10</u> | #/100 SQ. FT. | <u>7</u> | CC | <u>14.8</u> | HT-HP WATER LOSS | <u>2 1/2</u> | FUNNEL VISC. | SOLIDS | <u>5</u> | % |
| CHLORIDE | <u>180</u> | PPM | <u>100</u> | CA | <u>9.5</u> | pH | ALK | FILTER CAKE | SAND | <u>1/4</u> | % |

SURVEYS _____ OTHER REMARKS _____

DETAIL drilled 8 3/4 hole from 5227' to 5260' work on pumps.
 drill ahead to 5318' bit plugged unable to circulate.
 R.D.H. to 4400' bit unplugged worked on pump
 able to circulate at 4400'. R.I.H. to 4700 circulate
 R.I.H. to 5318 at 6AM

Total down time 8 1/2 hrs Rig repair

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|----------------|
| CUMULATIVE MUD COST | <u>86,628</u> | CUMULATIVE DAILY COST | <u>1,485,697</u> | DRILLING REPRESENTATIVE | <u>B.R./CF</u> |
|---------------------|---------------|-----------------------|------------------|-------------------------|----------------|

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 91 CUM. ROTATING HRS. 597

5-23 1980

NO. D.O.E. 85-18 FIELD BEAUVILLE CONTRACTOR ATLANTIC

DEPTH 5502 BIT NO. 21 SIZE 8 1/4 MAKE-TYPE STC FS FEET 391 HOURS 42 JETS 16/16/16 CONDITION

BIT NO. _____ SIZE _____ MAKE-TYPE _____ FEET _____ HOURS _____ JETS _____ CONDITION _____

FROM 5318 FT. TO 5502 FT. 184 FT. IN 20 HRS. 35 WT. ON BIT 1000# SPEED 45 RPM

DRILLING SETUP BIT, JUNKSUB, 3 PT. REAMER, LEAD COLLAR STAB, MONEL STAB, Y-D.C. STAB

1-DC STAB, 2 DC STAB, 2 DC STAB, 2 DC STAB, 10 HW, JARS, 10 HW.

LAST CASING 9 5/8 AT 2937 FORMATION UDLMY PUMP PRESS. _____ PSI@ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

DRLG. FLUID BAROID MUD CO. GEL TYPE 9.1 PCF 45 SEC. 18 CPS

| | | | | | | | | | | |
|------------|---------------|------------|------------------|-------------|----|-------------|---|----------|------------|---|
| <u>10</u> | #/100 SQ. FT. | <u>7.0</u> | CC | <u>14.9</u> | CC | <u>7.32</u> | % | <u>5</u> | <u>1/4</u> | % |
| WATER LOSS | | | HT-HP WATER LOSS | | | FILTER CAKE | | | SOLIDS | |

| | | | | | | | | | | |
|------------|-----|------------|-----|------------|-----|---------------|--|--|---------------|--|
| <u>160</u> | PPM | <u>100</u> | PPM | <u>9.5</u> | ALK | GALS (% MIN.) | | | OTHER REMARKS | |
| CHLORIDE | OIL | CA | pH | | | | | | | |

SURVEYS 5370' 2° N 30E

DETAIL Drill 8 1/4 hole from 5318' to 5370' circulate survey drill ahead to 5502 drilling ahead at 6AM.

CUMULATIVE
MUD COST 87,954

CUMULATIVE
DAILY COST 1,496,517

DRILLING REPRESENTATIVE BRR/CF

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 92 CUM. ROTATING HRS. 600

May 24 19 80

| | | | | | |
|-------|---------------------|---------|----------------|------------|-----------------|
| L NO. | <u>D.O.E. 85-18</u> | FIELD | <u>Bowdoin</u> | CONTRACTOR | <u>Kenai #7</u> |
| DEPTH | <u>5528</u> | BIT NO. | <u>21</u> | SIZE | <u>8 3/4"</u> |
| | | | | MAKE-TYPE | <u>Smith F5</u> |
| | | | | FEET | <u>417</u> |
| | | | | HOURS | <u>45</u> |
| | | | | JETS | <u>161616</u> |
| | | | | CONDITION | <u>5-5-I</u> |
| | | BIT NO. | <u>22</u> | SIZE | <u>8 3/4"</u> |
| | | | | MAKE-TYPE | <u>Smi F7</u> |
| | | | | FEET | |
| | | | | HOURS | |
| | | | | JETS | <u>11</u> |
| | | | | CONDITION | |
| FROM | <u>5502</u> | FT. TO | <u>5528</u> | FT. | <u>26</u> |
| | | | | IN | <u>3</u> |
| | | | | HRS. | <u>35</u> |
| | | | | WT. ON BIT | <u>1000#</u> |
| | | | | | <u>45</u> |
| | | | | | RPM |

DRILLING SETUP

LAST CASING 9 5/8" AT 2937 FORMATION Valmy PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|---------------|------------|------|------------------|-----|---------------|---------------|---------------|------------|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>Gel</u> | TYPE | <u>9.1</u> | PCF | <u>13</u> | SEC. | <u>17</u> | CPS |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | |
| | <u>8</u> | #/100 SQ. FT. | <u>7.2</u> | CC | <u>15.2</u> | CC | <u>2 1/32</u> | <u>5</u> | % | <u>1/1</u> |
| | | | | | HT-HP WATER LOSS | | FILTER CAKE | SOLIDS | | SAND |
| | <u>180</u> | PPM | <u>%</u> | CA | <u>9.8</u> | pH | ALK | GALS (% MIN.) | | |
| CHLORIDE | OIL | | | | | | | | OTHER REMARKS | |

SURVEYS

DETAIL Drld 8 3/4" hole f/5502' t/5528'. POH. Magnaflux d.c. & stab. I/D 1 cracked d.c.,
two stab, and junk sub. RIH w/new bit @ 6 AM.

CUMULATIVE MUD COST 87,954

CUMULATIVE DAILY COST 1,514,891

DRILLING REPRESENTATIVE BR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 93 CUM. ROTATING HRS. 617

May 25 1980

| | | | | | |
|--------|---------------------|---------|----------------|------------|------------------|
| L NO. | <u>D.O.E. 85-18</u> | FIELD | <u>Beowawe</u> | CONTRACTOR | <u>Kenai #7</u> |
| DEPTH | <u>5672</u> | BIT NO. | <u>22</u> | SIZE | <u>8 3/4"</u> |
| | | | | MAKE-TYPE | <u>Smith F57</u> |
| | | | | FEET | <u>144</u> |
| | | | | HOURS | <u>17</u> |
| | | | | JETS | <u>11</u> |
| | | | | CONDITION | |
| FROM | <u>5528</u> | BIT NO. | | SIZE | |
| FT. TO | <u>5672</u> | FT. | <u>144</u> | FEET | |
| | | | | HOURS | <u>17</u> |
| | | | | WT. ON BIT | <u>35</u> |
| | | | | 1000# | <u>45</u> |
| | | | | SPEED | |

DRILLING SETUP _____

LAST CASING 9 5/8" AT 2937 FORMATION Valmy PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|---------------|------------|------------|------------------|-----|--------------|-------------|---------------|---------------|
| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>Gel</u> | TYPE | <u>9.2</u> | PCF | <u>16</u> | SEC. | <u>19</u> | CPS |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | |
| YIELD PT. | <u>11</u> | #/100 SQ. FT. | <u>7.6</u> | WATER LOSS | <u>15.2</u> | CC | <u>2</u> | <u>1/32</u> | <u>5</u> | % |
| | | | | | HT-HP WATER LOSS | | FILTER CAKE | | SOLIDS | % |
| CHLORIDE | <u>180</u> | PPM | <u>20</u> | PPM | <u>10.0</u> | pH | ALK | | GALS (% MIN.) | |
| OIL | | CA | | | | | | | | OTHER REMARKS |

SURVEYS _____

DETAIL Drld 8 3/4" hole f/5528' t/5672'. Drlg ahead @ 6 AM.

Temp in: 130°

Temp out: 163°

CUMULATIVE MUD COST 87,954

CUMULATIVE DAILY COST 1,523,588

DRILLING REPRESENTATIVE BRR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 94 CUM. ROTATING HRS. 640 May 26 1980

| | | | | | | | | | | | | | | |
|-------|---------------------|---------|----------------|------------|-----------------|-----------|---------------|------|------------|------------|-----------|------|-----------|-----------|
| L NO. | <u>D.O.E. 85-18</u> | FIELD | <u>Beowawe</u> | CONTRACTOR | <u>Kenai #7</u> | | | | | | | | | |
| DEPTH | <u>5850</u> | BIT NO. | <u>22</u> | SIZE | <u>8 3/4"</u> | MAKE-TYPE | <u>S-F 57</u> | FEET | <u>322</u> | HOURS | <u>40</u> | JETS | <u>11</u> | CONDITION |
| | | BIT NO. | | SIZE | | MAKE-TYPE | | FEET | | HOURS | | JETS | <u>11</u> | CONDITION |
| FROM | <u>5672</u> | FT. TO | <u>5850</u> | FT. | <u>178</u> | IN | <u>23</u> | HRS. | <u>35</u> | WT. ON BIT | 1000# | | | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8" AT 2937 FORMATION Valmy PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|---------------|------------|------|-------------|-----|---------------|----------|---------------|-----|
| DRLG. FLUID | <u>Benton</u> | MUD CO. | <u>Gel</u> | TYPE | <u>8.8</u> | PCF | <u>40</u> | SEC. | <u>15</u> | CPS |
| | | | | | WEIGHT | | FUNNEL VISC. | | PLASTIC VISC. | |
| YIELD PT. | <u>8</u> | #/100 SQ. FT. | <u>7.6</u> | CC | <u>15.2</u> | CC | <u>2 /32</u> | <u>1</u> | % | % |
| CHLORIDE | <u>180</u> | PPM | <u>100</u> | PPM | <u>9.8</u> | | FILTER CAKE | SOLIDS | | |
| OIL | | CA | | pH | | ALK | GALS (% MIN.) | | | |

SURVEYS _____ OTHER REMARKS _____

DETAIL Drld 8 3/4" hole f/5672' t/5850'. Drlg ahead @ 6 AM.

Temp in 133°; Temp out 165°

CUMULATIVE MUD COST 89,739

CUMULATIVE DAILY COST 1,534,158

DRILLING REPRESENTATIVE BRB/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 95 CUM. ROTATING HRS. 652

May 27 1980

VEL NO. D.O.E. 85-18 FIELD Beowawe CONTRACTOR Kenai #7

| DEPTH | <u>5927</u> | BIT NO. | <u>22</u> | SIZE | <u>8 3/4"</u> | MAKE-TYPE | <u>S-F57</u> | FEET | <u>399</u> | HOURS | <u>52</u> | JETS | <u>11</u> | CONDITION |
|-------|-------------|---------|-----------------|---------|---------------|-----------|--------------|------|------------|-------|-----------|------|-----------|-----------|
| FROM | <u>5850</u> | FT. TO | <u>5927</u> FT. | BIT NO. | SIZE | MAKE-TYPE | | FEET | | HOURS | | JETS | <u>11</u> | CONDITION |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

DRILLING SETUP 8 3/4" bit, 3 pt. reamer, lead collar, stab, monel, stab, one d.c., stab, one d.c. stab, 2 d.c.'s, stab, 2 d.c.'s, stab, 2 d.c.'s, stab, 10 H.W., jars, 10 H.W.

LAST CASING 9 5/8" AT 2937 FORMATION Valley PUMP PRESS. _____ PSI@ _____ SPM

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| DRLG. FLUID | <u>Baroid</u> | MUD CO. | <u>Gel</u> | TYPE | WEIGHT | PCF | SEC. | CPS | |
|-------------|---------------|------------|------------|------------------|--------|---------------|--------|-----|---|
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | /32 | SOLIDS | % | % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | SAND | | |

SURVEYS 5916' 4° N32E OTHER REMARKS

DETAIL Drld 8 3/4" hole f/5850' t/5927' T.D. Circulate bottoms up. Survey. Wiped hole to shoe. Circulate for logs @ 6 AM.

CUMULATIVE MUD COST 89,739

CUMULATIVE DAILY COST 1,512,855

DRILLING REPRESENTATIVE BRR/RJA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS Pro-562

DRILLING DAYS 96 CUM. ROTATING HRS. 6525-28 1980WELL NO. DOE 85-18 FIELD BEOWAWE CONTRACTOR KENAI 7

| | | | | | | | | | |
|-------|--------------|---------|--|------|-----------|------|------------|-------|-----------|
| DEPTH | <u>5927'</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | WT. ON BIT | 1000# | RPM |

DRILLING SETUP _____

LAST CASING 9 1/8 AT 2937 FORMATION Volmy PUMP PRESS. _____ PSI@ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|-----|-----------------|--------------|---------------|---------------|
| DRLG. FLUID | <u>BARDID</u> | MUD CO. | <u>GEL</u> | TYPE | PCF | WEIGHT | FUNNEL VISC. | SEC. | CPS |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | /32 FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | OIL | % | CA | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |

SURVEYS _____

DETAIL P.O.H. Rig up Schlumberger run DISFL / Temp Survey
Sonic-Caliper FDC-CNL-GR at 6 AM

CUMULATIVE MUD COST 89739 CUMULATIVE DAILY COST 1,550,870 DRILLING REPRESENTATIVE BRR-1 CF

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELL Pro-562

DRILLING DAYS 97 CUM. ROTATING HRS. 652 5-29 1980WELL NO. D.O.E. 85-1B FIELD BEDWALIE CONTRACTOR KENAI #7

| | | | | | | | | | |
|-------|--------------|---------|--|------|-----------|------|------------|------|-----------|
| DEPTH | <u>5927'</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |
| | | | | | | | WT. ON BIT | | SPEED |

DRILLING SETUP _____

LAST CASING 9-5/8 AT 2937 FORMATION VOLMY PUMP PRESS. _____ PSI@ _____ SPM
 SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|--------|---------------|--------------|--------|-----|---|
| DRLG. FLUID | <u>BAROID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | /32 | FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | OIL % | CA | pH | ALK | GALS (% MIN.) | SAND | | | |

SURVEYS _____ OTHER REMARKS _____

DETAIL Schlumberger completed FDC-CNL-GR and ran dipmeter Rig down loggers. Rig up to lay down drill string. Laying down drill pipe at 6AM

| | | | | | |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>89,739</u> | CUMULATIVE DAILY COST | <u>1,580,986</u> | DRILLING REPRESENTATIVE | <u>BRR/CF</u> |
|---------------------|---------------|-----------------------|------------------|-------------------------|---------------|

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS PRO-562

DRILLING DAYS 98 CUM. ROTATING HRS. 6525-30 1980NO. D.D.E 85-18 FIELD BECKWALDE CONTRACTOR KENAI 7

| | | | | | | | | | |
|-------|-------------|---------|--|------|-----------|------|-------|------|-----------|
| DEPTH | <u>5927</u> | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | | FT. | IN | HRS. | 1000# | | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSI @ _____ SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | | | | |
|-------------|---------------|------------|------------|------------------|--------|---------------|---------------|--------|-----|---------------|
| DRLG. FLUID | <u>BARDID</u> | MUD CO. | <u>GEL</u> | TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | WATER LOSS | CC | HT-HP WATER LOSS | CC | /32 | FILTER CAKE | SOLIDS | % | % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS | | | |
| OIL | CA | | | | | | | | | |

SURVEYS _____

-FAIL COMPLETED LAYING DOWN DRILL PIPE, LAY DOWN DRILL COLLARS AND KELLY. REMOVED B.O.P.E. REPLACED MUD CROSS WITH TUBING HEAD AT 6:AM.

| | | | | | |
|---------------------|---------------|-----------------------|-----------------|-------------------------|---------------|
| CUMULATIVE MUD COST | <u>89,739</u> | CUMULATIVE DAILY COST | <u>1588,187</u> | DRILLING REPRESENTATIVE | <u>BRR/CF</u> |
|---------------------|---------------|-----------------------|-----------------|-------------------------|---------------|

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS #5-562

DRILLING DAYS 99 CUM. ROTATING HRS. 6525-31 1980WELL NO. D.O.E. 85-18 FIELD BEDWALL CONTRACTOR KENDAI 7

| | | | | | | | | |
|-------|-------------|---------|------|-----------|------|-------|-------|-----------|
| DEPTH | <u>5927</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM | | FT. TO | FT. | IN | HRS. | 1000# | SPEED | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 7937 FORMATION _____ PUMP PRESS. _____ PSIG _____ RPMSIZE DEPTH GPM ANNULAR VEL. FT./MIN. (D.P.) NOZZLE VEL. FT./SEC.

| | | | | | | | |
|-------------|--------------------------|--------------------|------------------|-----|------------------|---------------|---------------|
| DRLG. FLUID | <u>BARDID</u> MUD CO. | <u>GEL</u> TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS |
| YIELD PT. | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | 1/32 FILTER CAKE | SOLIDS | % SAND % |
| CHLORIDE | PPM | % | PPM | pH | ALK | GALS (% MIN.) | OTHER REMARKS |
| OIL | CA | | | | | | |

SURVEYS _____

DETAIL REPLACED MUD CROSS WITH TUBING HEAD. NIPPLE UP
BOPE CHANGE PIPE RAMS FOR 2 1/2" TUBING AT 6:AM.CUMULATIVE
MUD COST 89,739CUMULATIVE
DAILY COST 1,595,388DRILLING REPRESENTATIVE BRR / RA

RIG PHONE NO. _____

DAILY PROGRESS OF DRILLING WELLS NO. 562

DRILLING DAYS 100 CUM. ROTATING HRS. 10526-1 19 80WELL NO. DOE 95-18 FIELD BEDOUAWE CONTRACTOR KENAI 7

| | | | | | | | |
|-------------------|--------------|------|-----------|------|-------|------------|-----------|
| DEPTH <u>5927</u> | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| | BIT NO. | SIZE | MAKE-TYPE | FEET | HOURS | JETS | CONDITION |
| FROM _____ | FT. TO _____ | FT. | IN _____ | HRS. | 1000# | WT. ON BIT | RPM |

DRILLING SETUP _____

LAST CASING 9 5/8 AT 7937 FORMATION _____ PUMP PRESS. _____ PSIG _____ RPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | |
|--------------------------------------|----------------------|--------|------------------|--------------|-----------------|---------------|
| DRLG. FLUID <u>BARDID</u> MUD CO. | <u>WATER</u> TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS |
| #/100 SQ. FT. | WATER LOSS | CC | HT+HP WATER LOSS | CC | 1/2 FILTER CAKE | SOLIDS |
| YIELD PT. | PPM | % | PPM | PPM | % | % |
| CHLORIDE | OIL | CA | pH | ALK | GALS (% MIN.) | OTHER REMARKS |

SURVEYS _____

DETAIL COMPLETED CHANGING PIPE RAMS FOR 2 7/8 TUBING, TEST
B.D.P.E., RIG UP POWER TUBING TONGS, RAN 187 FT OF 2 7/8 6 1/2 #
N-80 ATLAS BRADFORD DSS TUBING. CHANGE OVER TO FORMATION
WATER THROUGH TUBING AT 3000' + 5900' CIRCULATE BOTTOMS
UP. LANDED TUBING TUBING IN TUBING HEAD. B&W FLOAT SHOE
AT 5922' REMOVING B.D.P.E. AT 6:AM.

CUMULATIVE
MUD COST89,739CUMULATIVE
DAILY COST1629, 244

DRILLING REPRESENTATIVE

BRR / RA

RIG PHONE NO. _____

Return to Rows

DAILY PROGRESS OF DRILLING WELLS NO. 562

DRILLING DAYS 101 CUM. ROTATING HRS. 1052

10-7 1980

NO. D.D.E. 85-18

FIELD BEOWAWE

CONTRACTOR

KENAI 7

DEPTH 5927 BIT NO.

SIZE

MAKE-TYPE

FEET

HOURS

JETS

CONDITION

BIT NO.

SIZE

MAKE-TYPE

FEET

HOURS

JETS

CONDITION

FROM _____ FT. TO _____ FT. IN _____ HRS. 1000# WT. ON BIT SPEED RPM

DRILLING SETUP _____

LAST CASING 9 5/8 AT 2937 FORMATION _____ PUMP PRESS. _____ PSIG SPM
SIZE DEPTH

PUMP OUTPUT _____ GPM ANNULAR VEL. _____ FT./MIN. (D.P.) NOZZLE VEL. _____ FT./SEC.

| | | | | | | | |
|--------------------------------------|----------------------|--------|------------------|--------------|-----------------|---------------|---------------|
| DRLG. FLUID <u>BAROID</u> MUD CO. | <u>WATER</u> TYPE | WEIGHT | PCF | FUNNEL VISC. | SEC. | CPS | PLASTIC VISC. |
| YIELD PT. | #/100 SQ. FT. | CC | HT-HP WATER LOSS | CC | 1/2 FILTER CAKE | SOLIDS % | SAND % |
| CHLORIDE PPM | OIL % | CA PPM | PH | ALK | GALS (% MIN.) | OTHER REMARKS | |

SURVEYS _____

MAIL REMOVE B.O.P.E. INSTALLED 3" POWER-R-SEAL GATE VALVE
ON TUBING HEAD. RELEASED RIG AT 2:PM 10-1-1980

CUMULATIVE
MUD COST

89,739

CUMULATIVE
DAILY COST

11663,938

DRILLING REPRESENTATIVE

BRR/RA

RIG PHONE NO.