

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR National Petroleum Reserve in Alaska (through Husky Oil NPR Operations, Inc.)

3. ADDRESS OF OPERATOR
2525 C Street, Suite 400, Anchorage, AK 99503

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1306' FNL; 705' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: Straight hole.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

5. LEASE
N/A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME National Petroleum Reserve in Alaska

9. WELL NO.
Ikpikpuk Test Well No. 1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 25, T13N, R10W, UM

12. COUNTY OR PARISH North Slope 13. STATE Alaska

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
Pad 32'; KB 52'

NOTICE OF INTENT-TO: SUBSEQUENT REPORT OF:

- | | | |
|----------------------|--------------------------|--------------------------|
| TEST WATER SHUT-OFF | <input type="checkbox"/> | <input type="checkbox"/> |
| FRACTURE TREAT | <input type="checkbox"/> | <input type="checkbox"/> |
| SHOOT OR ACIDIZE | <input type="checkbox"/> | <input type="checkbox"/> |
| REPAIR WELL | <input type="checkbox"/> | <input type="checkbox"/> |
| PULL OR ALTER CASING | <input type="checkbox"/> | <input type="checkbox"/> |
| MULTIPLE COMPLETE | <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE ZONES | <input type="checkbox"/> | <input type="checkbox"/> |
| ABANDON* | <input type="checkbox"/> | <input type="checkbox"/> |

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

(other) Subsequent Report of Running and Cementing 7" Liner and Suspending Operations for Summer

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The following procedure describes the 7" liner running and cementing and summer suspension program conducted at Ikpikpuk Test Well No. 1 in anticipation of re-entry during the 1979-80 drilling season.

- An 8 1/2" hole was drilled to 14,210', at which point an assessment of the required work yet to be completed, along with the lateness in the drilling season, was made. Based on the assessment, it was decided to log, run 7" liner, and suspend the well for the summer with anticipation of re-entry during the 1979-1980 drilling season.
- The 8 1/2" hole was conditioned and logged.
- 7" liner was run and hung from 9528' to 14,208'. Centralizers 10' from shoe on nos. 3, 5, 7, 9, 11, 111, 109, 107, 105, 103 and 101 casing collars. Subsurface Safety Valve: Manu. and Type Set @ (See continuation)

18. I hereby certify that the foregoing is true and correct

SIGNED Max Brewer TITLE Chief of Operations DATE 11 May 79

(This space for Federal or State office use)

Conforms with pertinent provisions of 30 CFR 221.

TITLE _____ DATE _____

Sundry Notices and Reports on Wells

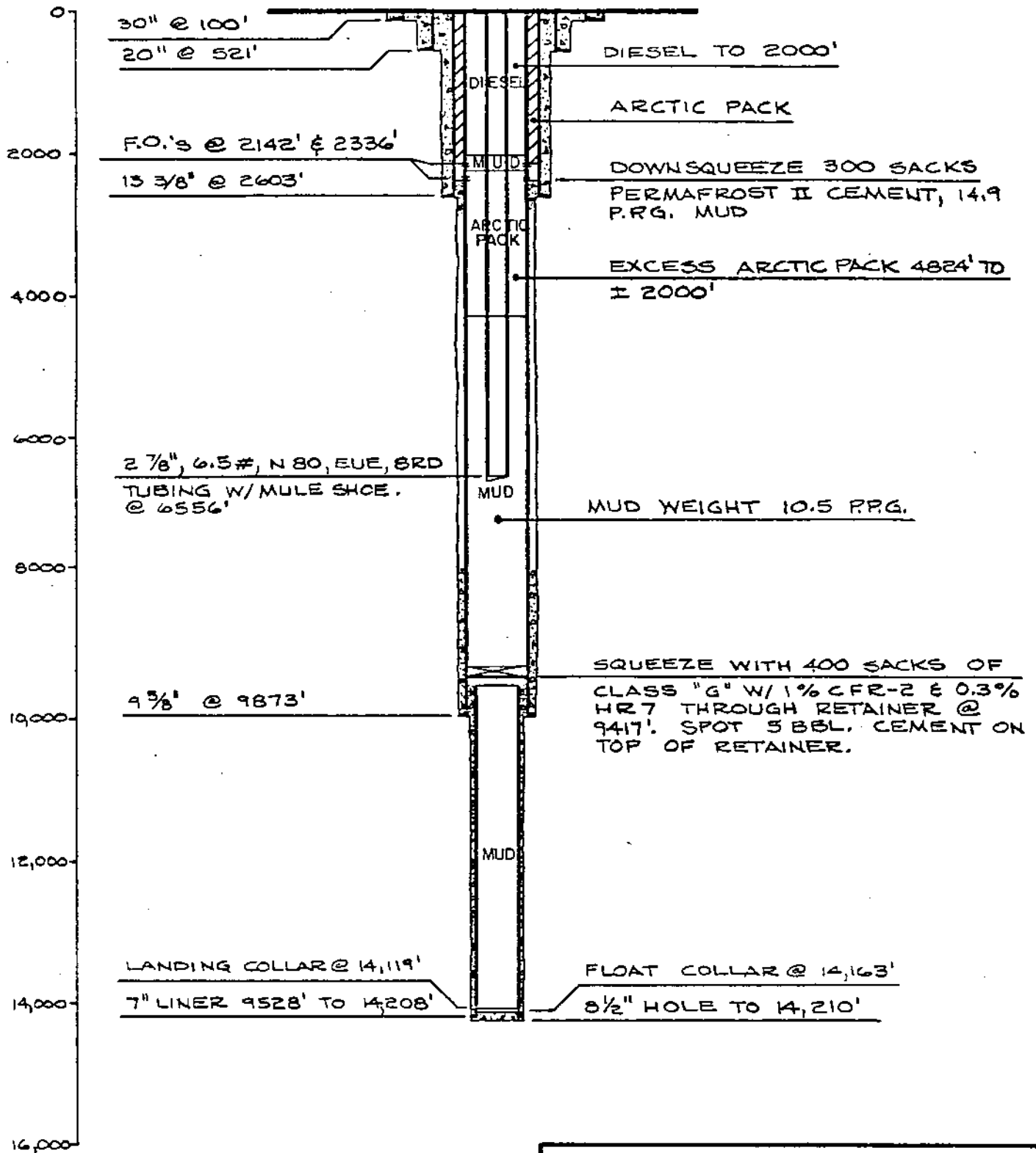
Ikpikuk Test Well No. 1

Subsequent Report of Running and Cementing

7" Liner and Suspending Operations for Summer

Page 2

4. Liner was cemented with 550 sacks Class "G" cement containing 1% CFR-2, 3.5% silica flour, .5% Halaïd 22-A, .5% LWL.
5. Ran 8 1/2" bit and 9 5/8", 53.5# scraper to top of liner.
6. Set Howco E-Z Drill retainer at 9417'. Squeezed lap with 400 sacks Class "G" cement containing 1% CFR-2 and .3% HR-7. Spotted 5 bbls cement on top of retainer.
7. Arctic Packed 9 5/8" X 13 3/8" annulus to surface through upper FO at 2142'.
8. Spotted 150 bbls excess Arctic Pack in hole from 4284' to 2165'.
9. Picked up to 2000'. Displaced mud to water and water to diesel.
10. Ran 2 7/8" tubing to 6556' with mule shoe and landed.
11. Nippled down BOP and nipped up National tubing bonnet and OCT Xmas tree. Tested to 5000 psi.
12. Prepared rig for summer shut down. Suspension work completed and rig released April 17, 1979, at 12:00 noon.



IKPIKPUK TEST WELL #1

1306' FNL & 785' FEL
 SEC 25, T.13 N., R.10 W., U. M.
 PAD LEVEL 32'
 K.B. 52'

HUSKY OIL N.P.R. OPERATIONS
 NATIONAL PETROLEUM RESERVE IN ALASKA

WELLBORE SCHEMATIC
 FOR SUMMER SUSPENSION

WELL SUMMARY SHEET

WELL NAME AND NO. IKPIKPUK TEST WELL NO. 1 API 50-279-20004

Location: 1306'S, 785'W from NE Corner Sec. 25 T 13N R 10W UPM

Date Spudded 11-28-78 Ground Elevation _____

Suspended 4-17-79 K.B. Elevation 110' Est.

Suspended 14,210' from K.B.
TD 14,100' Subsea

FORMATION TOPS

<u>Top</u>	<u>Forecast 12-29-79</u>	<u>Sample Top</u>	<u>Paleo Top</u>	<u>Log Top (DIL)</u>
Nanushuk Gp	<u>Near Surface</u>	<u>± 100'</u>	<u>± 100'</u>	<u>-</u>
Torok Fm	<u>3875'</u>	<u>3800'</u>	<u>3545' (F-10)</u>	<u>3750'</u>
"Pebble Shale Unit"	<u>7341'</u>	<u>7240'</u>	<u>7240' (F-12)</u>	<u>7237'</u>
-Pebble Shale Ss	<u>-</u>	<u>7428'</u>	<u>-</u>	<u>7432'</u>
Kingak Fm	<u>7350'</u>	<u>7465'</u>	<u>7480-7690' (F-15)</u>	<u>7640'</u>
So. Simpson Ss Equiv.	<u>-</u>	<u>-</u>	<u>-</u>	<u>9032'</u>
Sag River Ss	<u>9921'</u>	<u>9945' ±</u>	<u>9840'</u>	<u>9844'</u>
Shublik Fm	<u>8960'</u>	<u>10,140 (?)</u>	<u>10,180 (F-19)</u>	<u>9898'</u>
Sadlerochit Gp	<u>10,609'</u>	<u>10,500'</u>	<u>10,570' (F-20)</u>	<u>10,443'</u>
-Ivishak Fm	<u>10,609'</u>	<u>10,500'</u>	<u>10,570'</u>	<u>10,443'</u>
-Kavik Mbr	<u>-</u>	<u>11,100'</u>	<u>-</u>	<u>11,098'</u>
-Echooka Fm	<u>-</u>	<u>11,296'</u>	<u>11,290'</u>	<u>11,290'</u>
-Base Echooka Fm	<u>-</u>	<u>-</u>	<u>-</u>	<u>11,390</u>
-Lisburne Transition	<u>-</u>	<u>-</u>	<u>-</u>	<u>11,446'</u>
Lisburne Gp (Massive Ls)	<u>11,515'</u>	<u>11,704'</u>	<u>11,440 (F-21)</u>	<u>11,673'</u>
Endicott Gp	<u>13,640'</u>	<u>-</u>	<u>-</u>	<u>-</u>
Argillite	<u>15,921'</u>	<u>-</u>	<u>-</u>	<u>-</u>

Summary DST'S/Production TestSummary Cores

Core #	Interval	Footage Cut/Rec/%	Fm	General Lithology
1	2930-2960'	30' /30'/100	Kng	Sltst and Clyst
2	3784-3812'	28' /28'/100	Kng	Sh, med gy
3	5690-5700'	10' /10'/100	Kt	Sh, w/thin Sltst lam
4	7132-7143'	11' /11'/100	Kt	Sh, intbdd w/Slty Ss
5	7368-7378'	10' / 9'/ 90	Kps	Sh, dk gy-brn, w/occ floating sd grns
6	7491-7501'	10' /10'/100	Jk	Sh, dk gy-brn
7	10,270-10,300'	30' /30'/100	Es	Ls and Sh w/com-abund fos
8	10,619-10,649'	30' /30'/100	PT i	Ss, v.f. grn, hd, tt, NOSCF
9	10,815-10,842'	27' /27'/100	PT i	Ss, v.f. grn, hd, tt, NOSCF
10	11,108-11,135'	27' /27'/100	PT k	Sh, dk gy, hd, rr carb plant frags
11	11,718-11,733'	15' /15'/100	PMI	Ls, biocalcarinite, pelletal, tt, fair por, NOSCF
12	12,743-12,753'	10' /10'/100	PMI	Ls, biocalcarinite, pelletal, tt, NOSCF

Summary Wireline Logs

Run #1 @ 521' - SP/GR/DIL, GR/BHC/TTI

Run #2 @ 2603' - SP/GR/DIL, GR/BHC/TTI

Run #3 - DIL/SP/GR 2603-9904'; BHC/GR 2603-9904'; FDC/CNL/GR 2606-9908', HRD 2603-9909';
CST bottom shot @ 9890', Velocity Survey 250-9854'Run #4 - GR/SP/DIL 9600-14,202'; GR/CAL/CNL/FDC 9600-14,198'; GR/CAL/BHC 9600-14,190';
HRD Dipmeter 9867-14,205'; Velocity Survey 2880-14,210'; CST Sidewalls,
shot 30, rec 13.Summary Hydrocarbon Shows:

6923': Torok Fm, Ss, v.f. grn, arg, w/swelling Cly, nil vis por, 80% vel spl fluor,
no stn, vel wh cut fluor; 1210 units total gas, 22,000 ppm C₁, 15,000 ppm C₂,
4000 ppm C₃, 1020 ppm C₄, 81 ppm C₅.

11,708': Lisburne Fm, v. p. gas show at top of Lisburne Ls (850 units ditch gas, pred
C₁), v.p. pinpoint por, tr blk residual oil.

11,806-11,922': Lisburne Fm, tr gas shows, 47-335 units.

Summary Casing Run:

20" @ 521'; 13 3/8" @ 2603'; 9 5/8" @ 9873'; 7" liner @ 14,528'.

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 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
 AT SURFACE: 1306' FNL; 785' FEL
 AT TOP PROD. INTERVAL:
 AT TOTAL DEPTH: Same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(other)		

5. LEASE
N/A
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
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Sec 25, T13N, R10W, UM
 12. COUNTY OR PARISH | 13. STATE
North Slope | Alaska
 14. API NO.
 15. ELEVATIONS (SHOW DF, KOB, AND WD)
Est 32' Pad; 52' KB

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

5 7/8" hole was drilled to 15,481'. Conditioned hole for logs. Ran Temperature Survey to 11,600'. Tool failed. Second run failed at 12,900'. Attempted DIL/GR; it failed. Successfully ran Temperature Log to 15,435'. Ran DIL/GR 15,394' - 14,194'. BHC-Sonic/GR 15,294' - 14,194'. FDC/CNL/GR/CAL 15,400' - 14,194'. Dipmeter, Velocity Survey, 14 shots, to 15,405'. Temperature Log. Evaluated logs and decided no porous or hydrocarbon bearing formations. RIH with open ended drill pipe to 15,155'. Spotted 90 sacks Class "G" cement containing 35% Silicia Flour, 1% CFR-2, .6% Halad 22A, 1% HR 20. Mixed at 15.6 ppg. Top cement at 14,700'. Pull up to 14,397'. Spot Plug No. 2, 60 sacks Class "G" cement (same as Plug No. 1). Top at 14,020'. (188' in 7" liner.) POH. RIH with 5 1/2" bit and 7" casing scraper to 13,850'. POH. Set retainer at 13,800'. POH to 9725'. Spot Plug No. 3, 75 sacks Class "G" cement (same as Plug No. 1). Top plug 9328'. Run 9 5/8" casing scraper to 9300'. Set retainer at 9254'. Spot Plug No. 4, 50 sacks Class "G" cement (same as Plug No. 1).
 Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Max Brewer TITLE Chief of Operations DATE 20 March 80

(This space for Federal or State office use)

conforms with
pertinent
provisions of
30 CFR 221.

TITLE _____ DATE _____

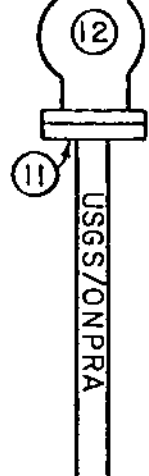
as Plug No. 1). Top cement at 9054'. Condition mud to 10.4 ppg at 8882'. POH. Test BOPE. Perforate at 7583' with 4 shots. Set 9 5/8" retainer at 7537'. Squeeze formation with 75 sacks Class "G" cement with 1% CFR-2. Injection rate 1 1/3 BPM at 1400 psi. Final 1800 psi. Left 10 sacks on top of retainer. Perf 5 shots at 7390'. Set 9 5/8" retainer at 7350'. Injection rate 1 1/2 BPM at 2800 psi. Squeeze 50 sacks Class "G" cement containing 1% CFR-2. Final 1/4 BPM at 2400 psi. ISIP 1900 psi. Left 5 sacks on top retainer. RIH with bit. Tag cement at 7332'. Drill to retainer at 7350'. Drill retainer and cement to 7390'. Tag cement at 7530'. Run scraper to 7530'. Run VDL/CBL/GR/CCL log from 7522' to 2100'. Perforate 7446' to 7442'. 26' 4 shot/ft with 4" casing gun. Run DST No. 1 no cushion. Packer at 7380'. 30 minute initial flow. Strong blow. 2 1/2 hour initial shut in. 6 hour final flow. 12 hour shut in. Recovered 23 3/4 bbls mud and gas cut mud. 1338' fluid rise. Pull tools loose. POH. Run bit and scraper to 7525'. Set retainer at 7345'. Squeeze perfs with 75 sacks Class "G" cement containing 1% CFR-2 at 15.8 ppg. Inject 2 BPM at 800 psi ISIP 700 psi. CIP 11:36 AM, 2/23/80. Spot 5 sacks on top retainer. Perforate 4 holes at 6950'. Set retainer at 6940'. Injection rate 3 BPM at 1100 psi. Squeeze with 150 sacks Class "G" cement containing 1% CFR-2. 3 BPM at 1100 psi. ISIP 450 psi. CIP 12:20 AM, 2/24/80. Perforate 4 shots at 6862'. Set retainer at 6819'. Injection rate 2 1/2 BPM at 1500 psi. Squeeze 150 sacks Class "G" cement containing 1% CFR-2. 15.8 ppg. 3 BPM at 1400 psi. CIP 10:01 AM, 2/24/80. ISIP 1000 psi. Tag cement at 6791'. Drill cement to 6865'. Wash and ream to 6939'. Run scraper to 6939'. Perforate 6917' to 6923', 6903' to 6910', 6893' to 6898', 6877' to 6883' with 4 shot per ft and 4" casing gun. Run DST No. 2 with packer at 6821'. No cushion. 30 minute initial flow, 1 hour initial shut in. 3 hour final flow and 6 hour shut in. Gas to surface at 50 minutes in final flow. Shut in final flow at 7:56 AM. Reverse out recovery 935' or 16.6 bbls gas cut mud. 2100 ppm max C1² in samples. Pull tools loose at 2:00 PM, 2/26/80. POH. Run bit and scraper. Circulate and condition mud. Set retainer at 6818'. Break down formation at 1500 psi. 3 BPM at 1100 psi. Squeeze with 75 sacks Class "G" cement containing 1% CFR-2. 3 BPM at 1200 psi. CIP 4:05 AM, 2/27/80. ISIP 900 psi. 800 psi in 2 minutes. Spot 5 bbls cement on top retainer. POH. Lay down excess 5" DP and DCs. Set 9 5/8" retainer at 2118'. Spot 35 sacks Class "G" cement containing 1% CFR-2 on top retainer. Top cement 2047'. Reverse mud to water. Reverse water to diesel with 130 bbls diesel. Lay down DP. Nipple down BOPs. Clean mud pits. Install dry hole marker. Release rig at midnight 2/28/80. Rig down Parco Rig 96 to move off National Petroleum Reserve in Alaska.

Part No.

EQUIPMENT LIST

- | | |
|----|---|
| 1 | 20", 2000 psi slip-on Head, National. |
| 2 | 20", 2000 psi x 13 5/8", 5000 psi Casing Spool, National. |
| 3 | 13 5/8", 5000 psi x 13 5/8", 5000 psi Tubing Spool, National. |
| 4 | 20" Casing. |
| 5 | 13 3/8" Casing. |
| 6 | 9 5/8" Casing. |
| 7 | 3", 2000 psi L.P. Gate Valve. |
| 8 | 3", 5000 psi F.E. Gate Valve. |
| 9 | 3", 5000 psi F.E. Gate Valve. |
| 10 | 3", 5000 psi Blank Flange |
| 11 | 4", ANSI 150 R.F. Flange |
| 12 | 4", ANSI 150 R.F. Gate Valve. |

1/2" Needle Valve
 2"x1/2" Bull Plug Tapped
 4" ANSI 150 RF Flange w/2" L.P. Top

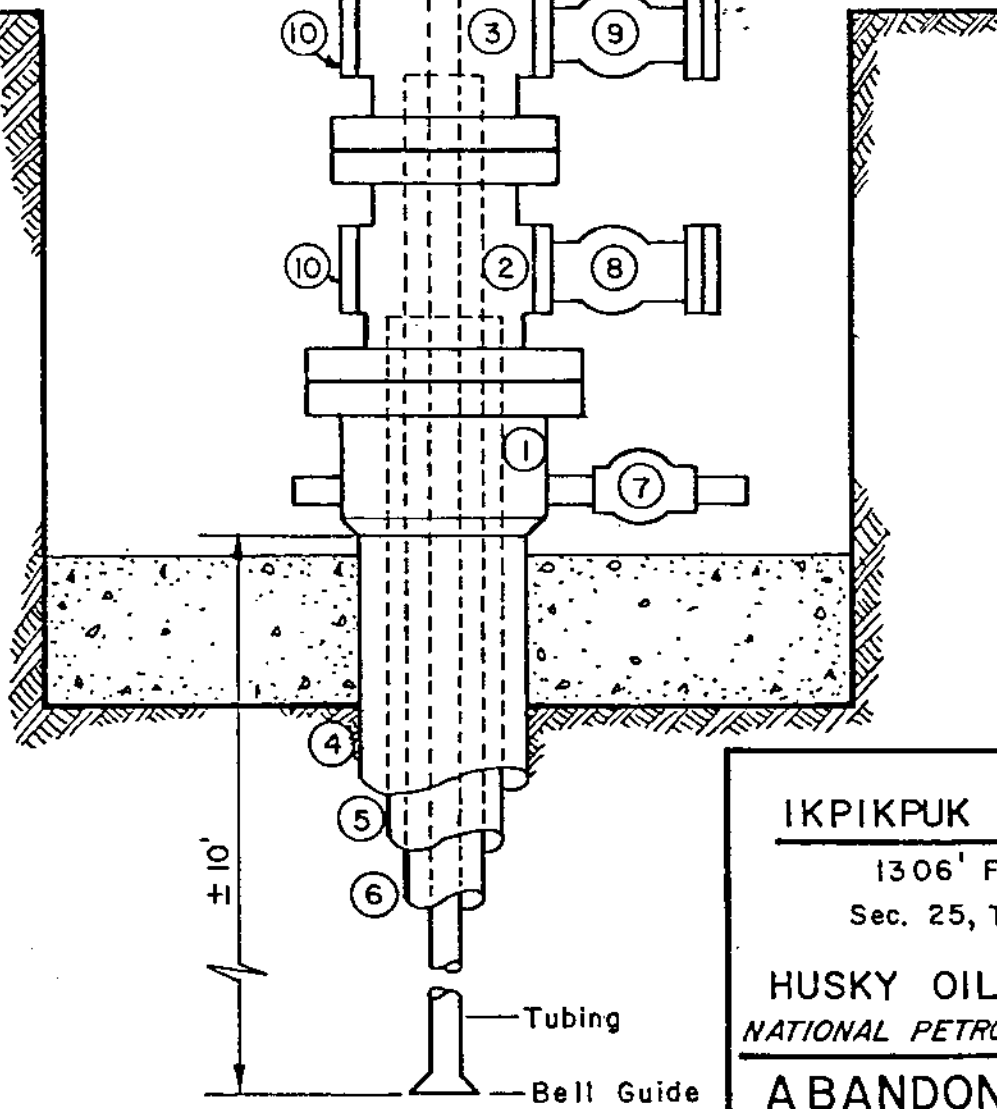


Mark as follows in welded writing on pipe:

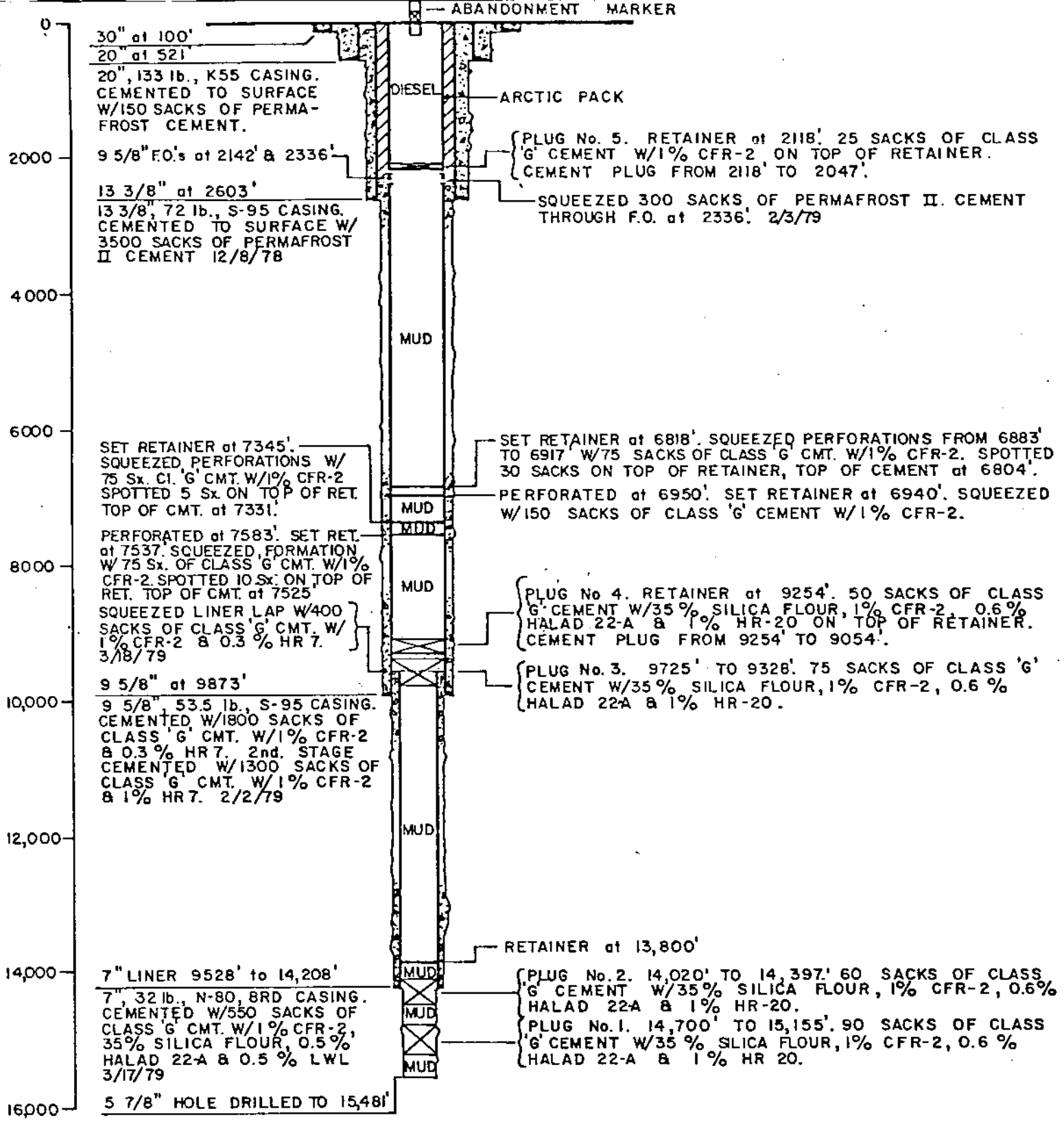
USGS / ONPRA
 IKPIKPUK TEST WELL No. 1
 1306' FNL, 785' FEL
 Sec. 25, T.13 N., R.10 W., U.M.

1/2" steel with gusset

1/8" Gasket Matl. Pack API ring with grease.



IKPIKPUK TEST WELL No. 1
 1306' FNL and 785' FEL
 Sec. 25, T.13 N., R.10 W., U.M.
 HUSKY OIL *N.P.R. Operations*
 NATIONAL PETROLEUM RESERVE in ALASKA
A BANDONMENT HEAD



IKPIKPUK TEST WELL No. 1

1306' FNL and 785' FEL

Sec. 25, T.13N., R.10W., U.M.

HUSKY OIL *N.P.R. Operations*
NATIONAL PETROLEUM RESERVE in ALASKA

WELLBORE SCHEMATIC