Form 9-331 C
(May 1963)

DUPLICATE

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal Fish Lake

9. WELL NO.: 1-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 1, T27S, R3E S.L.B. & M

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] OTHER Exploratory SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Hamilton Brothers Oil Company

3. ADDRESS OF OPERATOR: 1600 Broadway, Suite 2600, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *)
At surface: 2214' FWL & 1563' FSL in Sec. 1, T27S, R3E
At proposed prod zone: S.L.M. & M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: From Fremont Northeast on Hwy #72 5.8 mi, 1/2 mi E into location

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg unit line, if any): 1563'

16. NO. OF ACRES IN LEASE: 2508.32

17. NO. OF ACRES ASSIGNED TO THIS WELL: 640

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: Nil

19. PROPOSED DEPTH: 10,200'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): Ground level 8193

22. APPROX. DATE WORK WILL START*: May 1, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5# K-55	1100' +	1150 cu ft
12 1/4"	9 5/8"	36# S-80	Est. 5000'	900 cu ft, or 500' above oil-gas zones
8 3/4"	5 1/2"	17#-20# N-80	To be determined	500' above upmost oil or gas zor

Proposed Program Attached

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ed Jungkoenbeg TITLE Drilling Superintendent DATE March 10, 1981

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W P Mouritsen TITLE FOR E W GUYNN DISTRICT ENGINEER DATE MAY 13 1981

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY
*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

NOTICE OF APPROVAL
State O & G

Identification No. 358-81

United States Department of the Interior
Geological Survey
Oil and Gas Operations
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator/Project Name HAMILTON BROTHERS OIL COMPANY

Project Type OIL OR GAS WELL

Project Location 2214' FWL, 1563' FSL, SEC 1, T27S, R3E

Date Project Submitted 3-18-81

FIELD INSPECTION Date 4-7-81

Field Inspection Participants

George J. Diwachak	USGS
Don Okerlund	USFS
Stanley Buck	USFS
Ed Jurykousky	Hamilton Bros.
Earl Brown	Brown Bros. Const. Co.
Arlun Brown	" " " "

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

5/12/81
Date Prepared

George J. Diwachak
Environmental Scientist

I concur

MAY 12 1981
Date

W P Martin FOR E W GUYNN DISTRICT ENGINEER
District Supervisor

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency: Correspondence (date)	Federal/State Agency: Phone check (date)	Federal/State Agency: Meeting (date)	Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
1. Public health and safety						2	6	6 (4-7-81)	4, 10
2. Unique characteristics		8				2	6	6	4, 10
3. Environmentally controversial		8					6	6	4, 10
4. Uncertain and unknown risks						2	6	6	4, 10
5. Establishes precedents							6	6	4, 10
6. Cumulatively significant							6	6	4
7. National Register historic places									9
8. Endangered/ threatened species							6 (USFS-FIELD)		
9. Violate Federal, State, local, tribal law		8					6		4

PLEASE REFER TO ATTACHED LEGEND

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey (Conservation Division, Geological Division, Water Resource Division, Topographic Division)
3. Lease Stipulations/Terms
4. Application Permit to Drill INCUDING SURFACE USE PLAN ADDENDUM DATED 4/20/81
5. Operator Correspondence
6. Field Observation (INCLUDING FIELD NOTES)
7. Private Rehabilitation Agreement
8. MEMORANDUM TO WELL FILE DATED 5/11/81
9. ARCHAEOLOGICAL REPORT - POWERS ELEVATION CO
10. RECOMMENDED STIPULATIONS

HAMILTON BROS
#1-1

↑
S

Attach this to each CER

RECOMMENDED STIPULATIONS

1. THE 13-POINT SURFACE USE PLAN OF THE APD INCLUDING THE ADDITIONAL ITEMS SUBMITTED AT U.S. FOREST SERVICE REQUEST ON APRIL 20, 1981 SHALL BE ADHERED TO.

2. THE U.S. FOREST SERVICE, LOA RANGER DISTRICT SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION

3. AT LEAST ONE HALF OF THE RESERVE PIT DEPTH WILL BE IN CUT MATERIAL

4. DUE TO THE PROBABLE OCCURENCE OF HALITE IN THE CARMEL FORMATION AND FRESH WATER IN THE NAVAJO, THE SURFACE CASING SHALL EXTENDED TO SET INTO THE top OF THE NAVAJO (EXPECTED: AT 1400 FT OF DEPTH), WITH AN ADEQUATE QUANTITY OF CEMENT TO CIRCULATE TO SURFAC IF, HOWEVER, THE LOWER CARMEL CONTAINS WATER OF THE SAME QUALITY AS THE NAVAJO OR THE NAVAJO CONTAINS BRINE IN THE HOLE, THE ORIGINAL CASING PROGRAM MAY BE USED. ADEQUATE WATER SAMPLES OR WATER QUALITY ANALYSES SHALL BE SUBMITTED TO USGS FOR VERIFICATION.

5. AFTER SETTING OF THE INTERMEDIATE CASING STRING, THE NAVAJO AND WINGATE FORMATIONS SHALL BE ISOLATED WITH CEMENT TO PROTECT THEM FROM FURTHER OPERATION.

6. WHEN THE WELL IS ABANDONED, THE COCONINO, WINGATE, NAVAJO, AND ENTRADA SANDSTONES SHALL BE PROTECTED BY PLUGGING AT THEIR TOPS AND BOTTOMS

UNITED STATES GOVERNMENT

memorandum

DATE 5-11-81

REPLY TO ATTN OF ENVIRONMENTAL SCIENTIST

SUBJECT: SMA Concurrence to APD, Hamilton Bros. Oil Company No. 1-1
Sec 1, T27 S, R3E, U-18226

TO: WELL FILE

Per telecon w Lynn Findlay, U.S. Forest Service, Fishlake National Forest (Supervisor's Office), USFS concurrs w Surface Use Plan of APD with changes submitted 4/20/81. No additional stipulations are necessary as long as APD and addendum are followed. Copy of USFS EA and a concurrence letter will follow

George F Diwachak

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
(REV 7-76)
GSA FPMR (41 CFR) 101-11 6
5010-112

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U-18226

OPERATOR: HAMILTON BROTHERS WELL NO. 1-1

LOCATION: SE ¼ NE ¼ SW ¼ sec. 1, T. 27S, R. 3E, SLM.

WAYNE County, UTAH

---

1. Stratigraphy: OPERATOR'S STRATIGRAPHY APPEARS REASONABLE

VOLCANICS, ALLUVIUM - SURFACE
CARMEL ?
ENTRADA - 400'
NAVAJO - 1400'
KAYENTA - 2900'
WINGATE - 3100'
CHINLE - 3400'
SHINARUMP CONGLOMERATE - 3800'
MOENKOPI - 3900'
KAIBAB - 5100'
COCONINO LMS, -6000'
HERMOSA - 7000'
REDWALL LMS, -7800'
DEVONIAN -9000'
CAMBRIAN -9800'
T.D. -10,200'

2. Fresh Water: SEE ATTACHED WRD

3. Leasable Minerals: NONE

4. Additional Logs Needed: NONE

5. Potential Geologic Hazards: NONE EXPECTED

6. References and Remarks:

Signature: Larry Richardson Date: 4-28-81.

REQUEST FOR INFORMATION FROM WATER RESOURCES DIVISION

Date April 8, 1981

Person and Division making request LARRY R. HARRISON

AREA: County and State WAYNE, UTAH

Township 27 (S) N Range 3 (E) W Section 1 SE ¼ NE ¼ SW ¼ S BL&M

Altitude of surface at site 8193 Formation at surface (if known) volcanics

PURPOSE:

Protection of useful ground water (casing program); check ✓

Other (describe): I've enclosed a WRD from T 27S R 7E is it applicable to this area? — No. structure is different

For WRD use Date in: 4-10-81

Person assigned: Hood Date out: 4-13-81

Evaluation: This site is west of the Thousand Lake Fault, in an area where the sedimentary section is step-faulted down to the west (See Prof Paper 363, plate 1). This wo throw the Navajo down, and seemingly, isolate it from adjacent segments of the sandstone aquifer. However, the Navajo crops out in the mountais south of the site and in the same fault block; thus the sandstone might receive fresh recharge i that block. No hydrologic or water quality data area available for this immediate area, but the overlying Carmel thickens westward, the thickening being due to increase in shale, gypsum and salt. A recent test well 15-20 miles to the nothteast shows 400 feet of halite in the Carmel, and difficulty in drilling the section. Because of this occurrence, I believe that company should plan on setting their surface casing into the top of the Navajo unless they can show that the lower Carmel contains water of the same quality as the Navajo OR that the Navajo contains brine in the hole.

The intermediate casing string should protest the Navajo and Wingate during further operations. If the hole is abandoned, the Cocnino, Wingate, Navajo and Entrada Sandstone should be protected by plugging at their tpps and bottoms.

continue over

Signed by evaluator J M Hood Time used 1 hr

Evaluator: Send copy to coordinator - original direct to originator of request

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
303-861-2456

TELEX
45-881

TELECOPIER
303-839-1024

March 9, 1981

DIVISION OF
OIL, GAS & MINING

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Attention: Mr. Mike Minder RE: Hamilton Federal Fish Lake #1-1
Wayne County, Utah
Section 1, T27S, R3E

Dear Sir:

Enclosed for your approval, please find a copy of the following:

1) Survey plat of proposed well site

2) 13 Point surface use plan

3) Application for permit to drill

4) Information Complimenting Form 9-331C

Our nationwide oil and gas lease bond number 798123.

Please return proposal to the attention of the undersigned. If you require any further information please call (303) 861-2456.

Sincerely,

HAMILTON BROTHERS OIL COMPANY

Ed Jurykovsky

Ed Jurykovsky
Drilling Superintendent

EJ/ds

Enclosures

P.S. Copies have been forwarded to the following: 1) United States Geological Survey, Salt Lake City, Utah; 2) Bureau of Land Management, Hanksville, Utah; 3) United States Forest Service, Loa, Utah.

Form OGC-1a

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. Type of Well: Oil Well ☒ Gas Well ☑ Other Exploratory Single Zone ☐ Multiple Zone ☐

2. Name of Operator: Hamilton Brothers Oil Company Attn: Ed Jurykovsky ph. (303) 861-2456

3. Address of Operator: 1600 Broadway, Suite 2600, Denver, Colorado, 80202

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 2214 FWL & 1563 FSL of Sec. 1, T27S, R3E, S.L.B. & M.
At proposed prod. zone:

5. Lease Designation and Serial No.: U-18226

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:

8. Farm or Lease Name: Federal Fish Lake

9. Well No.: 1-1

10. Field and Pool, or Wildcat: Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 1, T27S, R3E S.L.B. & M.

12. County or Parrish 13. State: Wayne, Utah

14. Distance in miles and direction from nearest town or post office*
From Fremont Northeast on Hwy #72, 5.8 miles, 1/2 mile East into location.

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any): 1563'

16. No. of acres in lease: 2508.32

17. No. of acres assigned to this well: 640

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.: Nil

19. Proposed depth: 10,200' Cambrian

20. Rotary or cable tools: Rotary

21. Elevations (Show whether DF, RT, GR, etc.): Ground level 8193'

22. Approx. date work will start*: May 1, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17 1/2"	13 3/8"	54.5	1100' +	1150 cu ft.
12 1/4"	9 5/8"	36	Est. 5000'	900 cu ft or 500' above oil-gas zones.
8 3/4"	5 1/2"	17-20	to be determined	500' above upmost oil or gas zones

Proposed Program Attached

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 3/21/81
BY: [signature]

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed: Ed Jurykovsky Title: Drilling Superintendent Date: March 9, 1981

(This space for Federal or State office use)

Permit No. 43-055-30030 Approval Date

Approved by Title Date
Conditions of approval, if any:

*See Instructions On Reverse Side

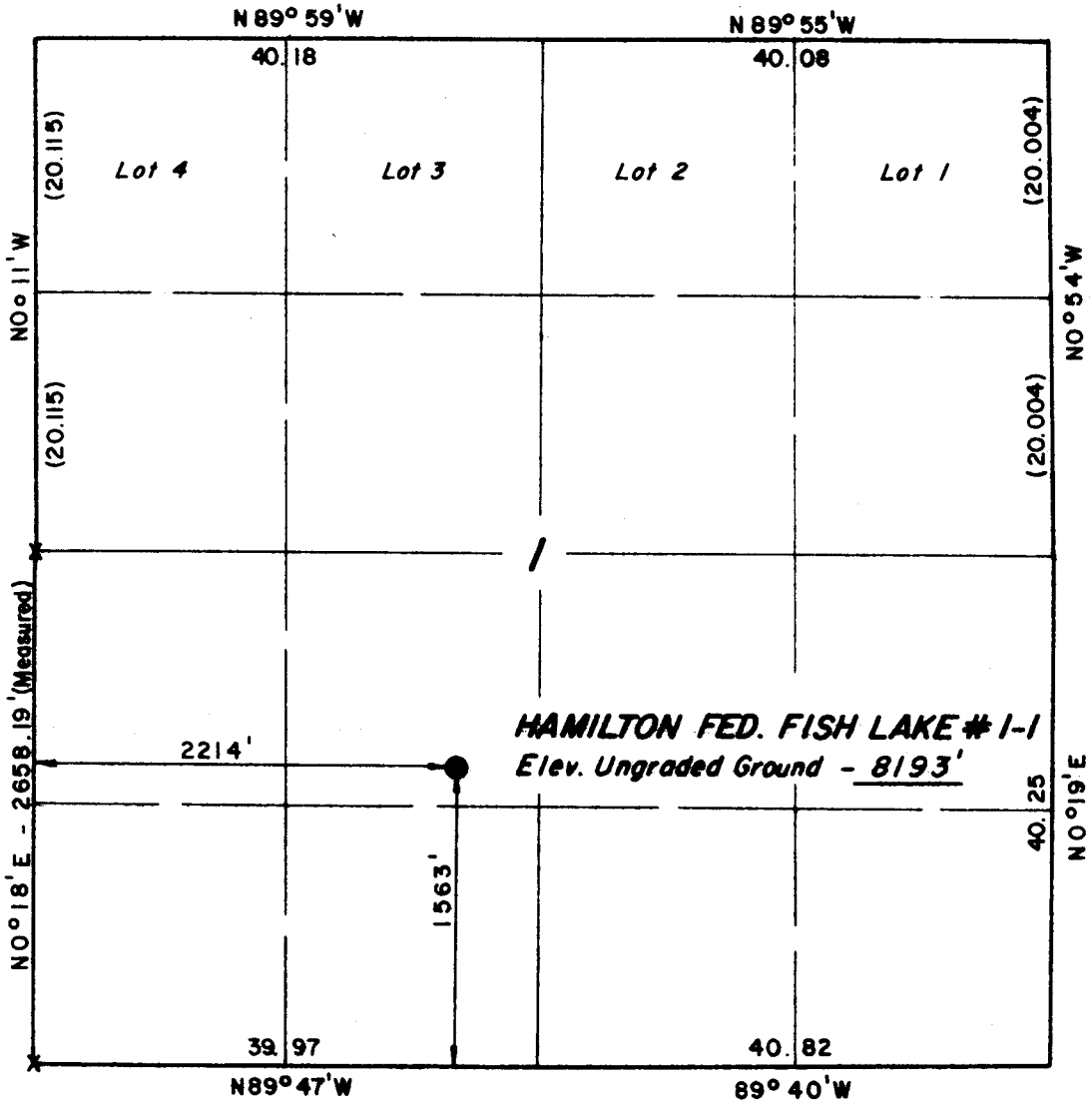
'S' bndry line

*

515
1563
1328
1351
1563

515
2658
1563
1095
2658

T 27 S , R 3 E , S.L.B.&M.



X = Section Corners Located

PROJECT

HAMILTON BROTHERS OIL COMPANY

Well location, *HAMILTON FED. FISH LAKE # 1-1*, located as shown in the NE 1/4 SW 1/4 Section 1, T27S, R3E, S.L.B.&M. Wayne County, Utah.

RECEIVED

DIVISION OF OIL, GAS & MINING

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Lawrence C. Kay

REGISTERED LAND SURVEYOR
REGISTRATION Nº 3137
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q – 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 2/27/81
PARTY RK BK RP	REFERENCES GLO Plat
WEATHER Snowing / Cold	FILE HAMILTON BROS. OIL CO.

United States Department of the
Interior Geological Survey

Information Complimenting Form 9-331 C

1. Alluvium and/or volcanics-surface formation.

2. Jurassic:

Entrada ss.	400'	depths estimate K.B.
Navajo ss.	1400'	

Triassic:

Kayenta	2900'
Wingate	3100'
Chinle	3400'
Shinarump Congl.	3800'
Moenkopi	3900'

Permian:

Kaibab Lms.	5100'
Coconino ss.	6000'

Pennsylvanian:

Hermosa	7000'

Mississippian:

Red Wall Lms.	7800'
Devonian	9000'
Cambrian	9800'

3. Alluvium and/or volcanics- Surface-possible fresh water
Conconino ss. 6000'-possible oil or gas
Red wall lms. 7800'-possible oil or gas

4. Surface casing: 1100' +, 13 3/8" K-55 54.5 lb/ft.-new

Intermediate casing: 5000' +, 9 5/8" S-80 36 lb/ft-new (if required)

Production casing: depth to be determined, 5 1/2" N-80 17 and 20 lb/ft.-new

5. Blow out preventors: 12" x 900 series slip on casing head will be welded on the 13 3/8" surface casing. 12" x 900 series Schaffer type hydraulic double ram type with complete closure and around drilling string, plus 12" x 900 series GK hydril, units to be operated with hydraulic closing unit,

plus auxiliary air bottles, sufficient air supply to close and open all blow out preventors with 1500 psi air supply remaining. Also sufficient stand by air supply hooked up in same manifold. 2" x 900 series kill line and choke manifold will be used, fill up line installed in drilling nipple below flow line.

All BOP equipment and auxiliary equipment such as kelly valve, mud lines, kill line, kelly hose, manifold and casing to be tested before drilling out shoe. Hydraulic closing unit to be checked tourly, pipe rams and hydril to be closed and opened daily, blind rams on each trip out of hole. BOP equipment to be retested every 30 days with testing plug in casing bowl. (Diagram attached).

6. Air, air mist or aerated drill mud will be used for the upper loss circulation zones, with non-dispersed low solids mud system for the lower section of the hole. Anticipated mud weights ranging from 9.6 to 9.8 lb/gal. will over balance bottom hole pressure.

7. Auxiliary equipment to be utilized will be a kelly valve, safety valve positioned on the rig floor to fit all threads in the drilling string, bottom hole float. Monitoring equipment such as pit level indicator, flow line sensor with alarms.

8. a) Drill stem tests will be run over any zones of interest from log evaluation.

   b) We expect to run the following logs:

      1. Induction
      2. Sonic
      3. FDC-CNL to be determined
      4. Dipmeter to be determined

   c) We do not expect to core.

9. Abnormal pressures or temperature are not anticipated, mud logging unit will monitor continually for H_2S gas, we do not anticipate any.

10. We would like to begin our construction work by May 1, 1981, if possible, this would allow the operation to be completed before the deer grazing season. We expect the construction and drilling operations to take approximately 130 days.

HAMILTON BROTHERS OIL COMPANY

13 Point Surface Use Plan

for

Well Location

Hamilton Federal Fish Lake #1-1

Located In

Section 1, T27S, R3E, S.L.B. & M.

Wayne County, Utah

HAMILTON BROTHERS OIL COMPANY
Hamilton Federal Fish Lake #1-1
Section 1, T27S, R3E, S.L.B.& M.

1. EXISTING ROADS

See attached Topographic Map "A".

To reach HAMILTON BROTHERS OIL COMPANY, well location site Hamilton Federal Fish Lake #1-1. located in the NE 1/4 SW 1/4 Section 1, T27S, R3E, S.L.B. & M., Wayne County, Utah:

Proceed East from Freemont, Utah along State Highway 72 - 5.8 miles to the junction of this Highway and an existing dirt road to the East. Proceed East along this road 0.5 miles to the junction with the proposed access road (to be dicussed in Item #2).

The Highway mentioned in the foregoing paragraph are bituminous surfaced roads to the point that the dirt road exists to the East. From this point the roads are all improved dirt to the proposed location site.

There will be a 4" gravel bed required on the last 0.5 miles of the above described roads. The gravel will be obtained from a private gravel pit approximately 1 mile Northeast of Freemont, Utah. These roads will meet the necessary standards required to facilitate an orderly flow of traffic during the drilling phase, completion phase, and production phase, of this well at such time that production is established.

The highway mentioned above is under Utah State jurisdiction and is maintained by State Road Crews.

The roads that are required for access during the drilling phase, completion phase, and production phase of this well, will be maintained at the standards required by the Forest Service or other controlling agencies.

2. PLANNED ACCESS ROAD

See Topographic Map "B".

The planned access road leaves the existing road described in Item #1 in the NE 1/4 SW 1/4 Section 1, T27S, R3E, S.L.B. & M. and proceeds in a Southerly direction 200' ± to the proposed location site.

In order to facilitate the anticipated traffic flow necessary to drill and produce this well, the following standards will be met:

The proposed road will be an 18' crown road (9' either side of the centerline) with drain ditches along either side of the proposed road where it is determined necessary in order to handle any run-off from normal meterological conditions that are prevalent to the area.

Back slopes along the cut areas of the road will be 1 1/2 to 1 slopes and terraced.

The road will be centerline flagged prior to the commencement of construction.

The access road will require a 4" gravel bed. This gravel wil be obtained from the above mentioned gravel pit.

The grade of this road will not exceed 8% and will be constructed from native borrow accumulated during construction.

There will be one culvert required along this road. It will be placed according to specification for culvert placement found in the Oil & Gas Surface Operations Manual (see Topographic Map "B").

There will be no turnouts required along this access road.

There are no fences encountered along this access road. There will be no gates or cattleguards required.

Most lands involved on this action are under B.L.M. jurisdiction.

The terrain that is traversed by this road is relatively flat. It is sparsely vegetated with sagebrush and grasses.

3. EXISTING WELLS

There are no known water wells, producing wells, abandoned wells, disposal wells, drilling wells, shut in wells, injection, monitoring or observation wells, for other resources within a one mile radius of this location site.

4. LOCATION OF TANK BATTERIES, PRODUCTION FACILITIES, AND PRODUCTION GATHERING AND SERVICE LINES

At the present time there are no existing batteries, production facilities, gas gathering lines, injection or disposal lines within a one mile radius of this location site belonging to HAMILTON BROTHERS OIL COMPANY.

In the event that production of oil from this well is established then the existing area of the location will be utilized for the establishment of the necessary production facilities.

This area will be built, if possible, with native materials and if these materials are not available, then the necessary arrangements will be made to get them from private sources.

The total area that is needed for the production of this well will be fenced and cattleguards will be utilized for access to these facilities if deemed necessary by the controlling agencies involved.

In the event that the production of natural gas is established then the necessary arrangements for a gas flow line will be made.

The rehabilitation of the disturbed area that is not required for the production of this well, will meet the requirements of Items #7 and #10 and these requirements and standards will be adhered to.

5. LOCATION AND TYPE OF WATER SUPPLY

See Topographic Map "B".

The anticipated water supply for this location is from a Freemont Irrigation System Canal due North of the location site. This water will be pumped from the canal to the proposed location site.

If this water source is not available then the necessary arrangements will be made to acquire the water needed for the drilling and production of this well and all agencies involved will be notified of any changes.

All regulations and guidelines will be followed and no deviations will be made unless all concerned agencies are notified.

All appropriate permits will be acquired and submitted to the proper authorities.

There will be no water well drilled at this location site.

6. SOURCE OF CONSTRUCTION MATERIALS

Construction material for this location site shall be borrow material accumulated during construction. In addtion to this there will be a 4" gravel bed required on the proposed location site. This gravel will be obtained from the aforementioned gravel pit.

7. METHODS OF HANDLING WASTE DISPOSAL

See Location Layout Sheet.

The reserve pit will vary in size and depth according to the water table at the time of drilling.

One half of the reserve pit will be used as fresh water storage area during the drilling of this well and the other one half will be used to store non-flammable materials such as cuttings, salts, drilling fluids, chemicals produced fluids, etc.

If deemed necessary by the agencies concerned, to prevent contamination to surrounding areas, the reserve pits will be lined with a gel.

The pits will have wire and overhead flagging installed at such time as deemed necessary to protect the water fowl, wildlife, and domestic animals.

At the onset of drilling, the reserve pit will be fenced on three sides and at the time the drilling activities are completed, it will be fenced on the fourth side and allowed to dry completely prior to the time that backfilling and reclamation activities are attempted.

When the reserve pit dries and the reclamation activities commence, the pits will be covered with a minimum of four feet of soil and all requirements of Item #10 will be followed.

A portable trash basket will be placed on the location site and all trash will be hauled to the nearest Sanitary Land Fill.

A portable toilet will be supplied for human waste.

All produced oil from this well will be contained in the storage tank and will be sold. Water, if any which is produced will be run into the reserve pits as required in the NTL-2B Regulations.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See attached Location Layout Sheet.

The Forest Service Representative shall be notified before any construction begins on the proposed location site.

As mentioned in Item #7, the pits will unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and would cause contamination to the surrounding area; then the pits will be lined with a gel and any other type of material necessary to make it safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil on the location site, all topsoil shall be stripped and stockpiled. (See location layout sheet and Item #9). When all drilling and production activities have been completed, the location site will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during the construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the trash pit shall be buried with a minimum of 5' of cover.

Restoration activities shall begin within 90 days after completion of the well. Once restoration activities have begun, they shall be completed within 30 days.

When restoration activities have been completed the location site will be reseeded with a seed mixure recommended by the Forest Service Representative when the moisture content of the soil is adequate for germination. The Lessee futher convenants and agrees that all of said clean-up and restoration activities shall be done and performed in a diligent and most workmanlike manner, and in strict conformity with the above mentioned Item #7 and #10.

11. OTHER INFORMATION

The Topography of the General Area - (See Topographic Map "A")

The terrain of the general area slopes from the rim of Thousand Lake Mountain to the Northeast to the Parker Mountain to the Southwest and is a portion of the Awapa Plateau.

The area is interlaced with numerous ridges and canyons formed by non-perennial streams and washes. The sides of the hills and canyons are rather steep and outcrops of rocks, conglomerates, and shale deposits, are common in the area forming ledges and cliffs along the sides of the canyons.

The visible geologic structures in the area are of the Tuscher Formation Tertiary Period and the Wasatch Formation also of the Tertiary Period.

The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during the early spring run-off and during extremely heavy rain storms of relatively long duration. This type of storm is rather uncommon as the normal annual precipitation is around 12".

The topsoil in the area ranges from a sandy-loam type soil to a clayey (OL) type soil.

Due to the low precipitation average, climatic conditions and the marginal types of soils, the vegetation that is found in the area are common of the semi-arid region we are located in, and consists of juniper, and pinion pine trees, sagebrush, scrub oak, shadscale, and bitterbrush, and some grasses and cacti as the primary flora.

The fauna of the area is sparse and consists predominantly of the mule deer, coyotes, rabbits, and varieties of small ground squirrels and other types of rodents,and various reptiles common to this area.

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

The area is used by man for the primary purpose of grazing domestic livestock and sheep.

HAMILTON BROTHERS OIL COMPANY
Hamilton Federal Fish Lake #1-1
Section 1, T27S, R3E, S.L.B.& M.

The Topography of the Immediate Area - (See Topographic Map "B").

Hamilton Federal Fish Lake #1-1 location site sits rather flat sloping area known as the Sage Flat. Pole Canyon is located to the North and Red Canyon to the South.

The visible structure of the location is of the Tuscher Formation and consists of brownish-gray clay (SP-CL) with some shale outcrops.

The ground slopes through the location to the Northwest at approximately a 4.8% grade.

The location is covered with some sagebrush, and grasses.

There are no visible archaeological, historical, or cultural sites within any reasonable proximity of the proposed location site. (See Topographic Map "B").

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Ed Jurykousky
1600 Broadway
Suite 2600
Denver, CO 80202

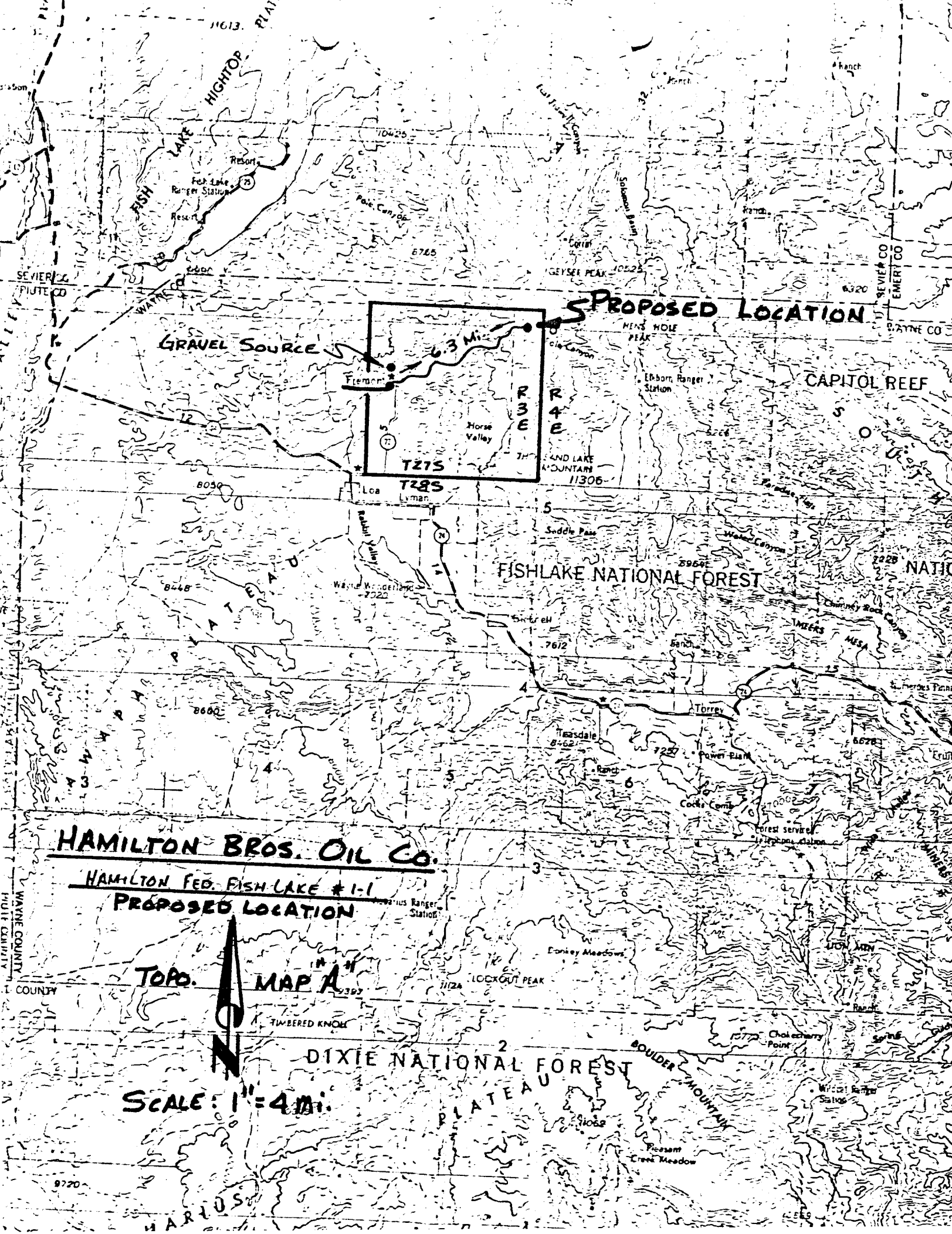
1-303-861-2456

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with the operation proposed herein will be performed by HAMILTON BROTHERS OIL COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

March 12, 1981
Date

Ed Jurykousky
Ed Jurykousky


HAMILTON BROS. OIL CO.
HAMILTON FED. FISH LAKE #1-1
PROPOSED LOCATION
TOPO. MAP A
SCALE: 1" = 4 mi.
PROPOSED LOCATION
GRAVEL SOURCE
6.3 Mi.
T27S
T28S
R3E
R4E
Fremont
Loa
Lyman
Torrey
Teasdale
Horse Valley
FISHLAKE NATIONAL FOREST
DIXIE NATIONAL FOREST
CAPITOL REEF
FISH LAKE HIGHTOP PLATEAU
SEVIER CO
PIUTE CO
WAYNE CO
EMERY CO
WAYNE COUNTY
PIUTE COUNTY
GEYSER PEAK
HENS HOLE PEAK
Elkhorn Ranger Station
Fish Lake Ranger Station
Resort
Pole Canyon
Saddle Pass
Rabbit Valley
Waste Wonderland
Sitterel
Ranch
Power Plant
Cocks Comb
Forest service telephone station
Donkey Meadows
LOOKOUT PEAK
TIMBERED KNOLL
Cherry Point
BOULDER MOUNTAIN
Pleasant Creek Meadow
Wildcat Ranger Station
Chimney Rock Canyon
TIMBERS MESA
Wolsey Canyon
Paradise Trail
Solomon Basin
Coral
Ranch
11613
10425
8765
10525
8320
8050
8448
8600
8962
7612
7257
6628
11306
9720

Hamilton Brothers Oil Company would like to announce a change in our mailing address effective immediately. Please send all correspondence to:

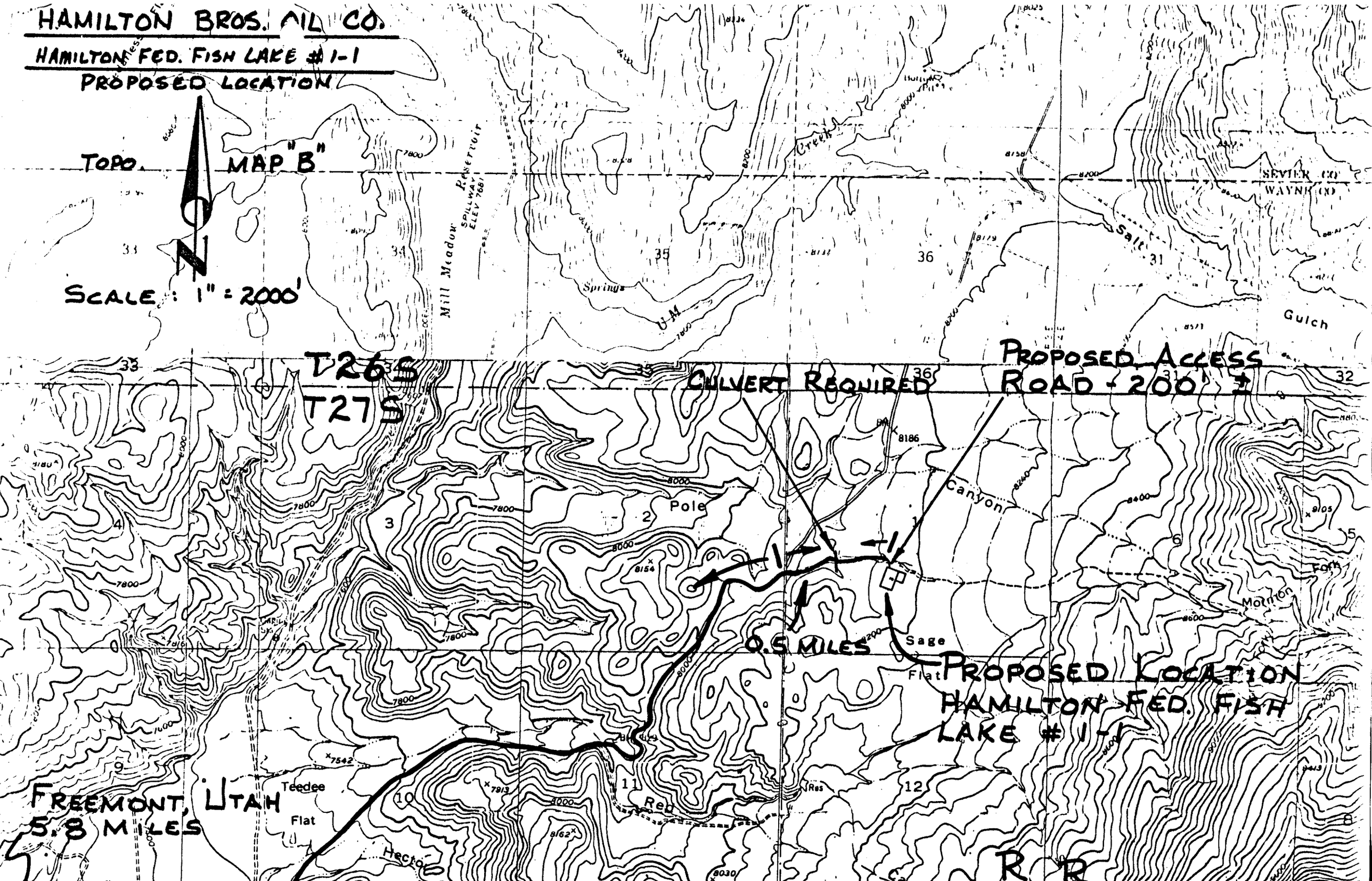
Hamilton Brothers Oil Company
1600 Broadway
P.O. Box 5870
Denver, Colorado 80217

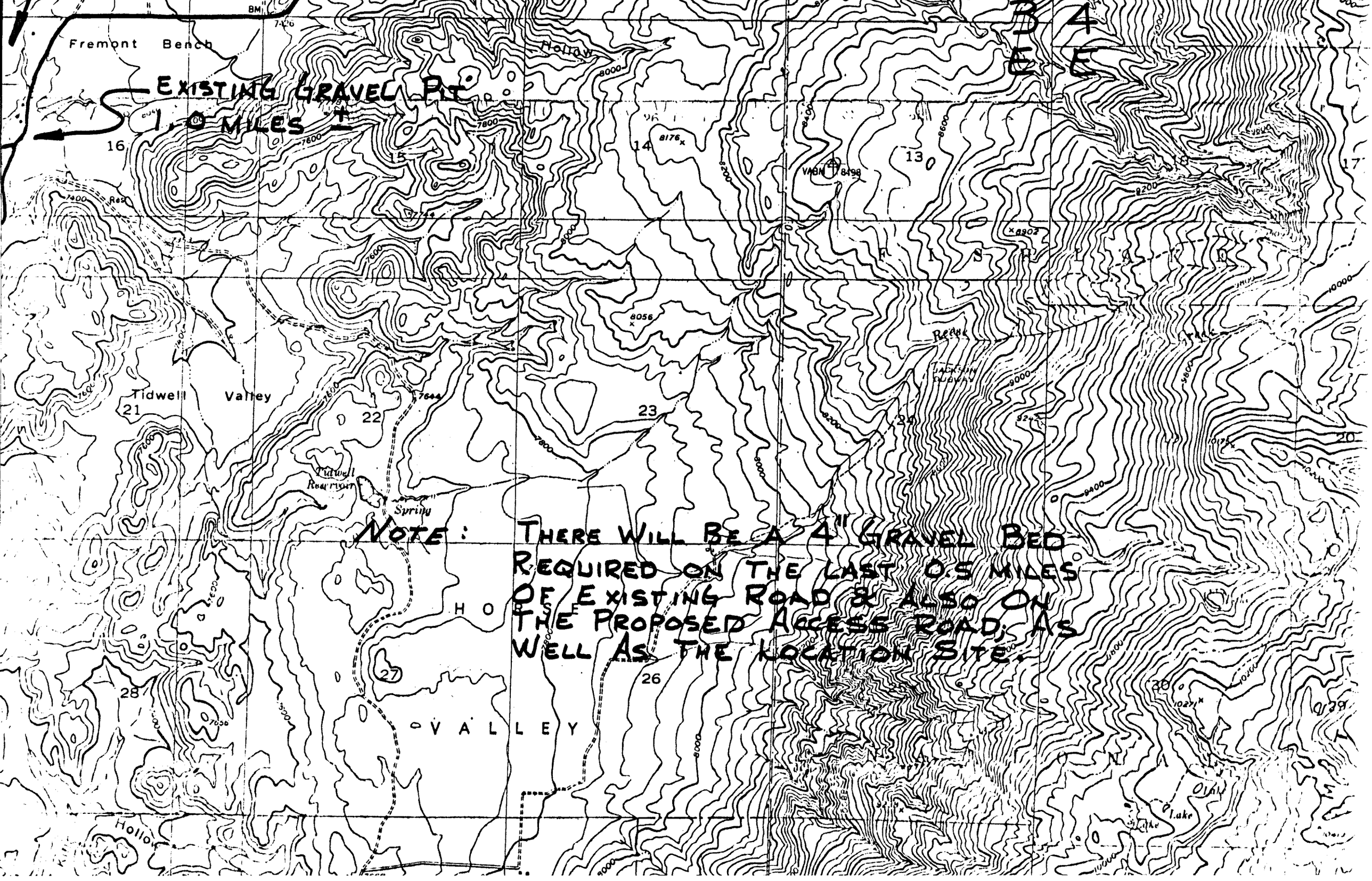
Our street address and telephone number remain the same.

Hamilton Brothers Oil Company
1600 Broadway
P.O. Box 5870
Denver, Colorado 80217

FIRST-CLASS MAIL
U.S. Postage
PAID
Permit No. 501
Denver, Colorado

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCE
DIVISION OF OIL,GAS AND MINING
1588 WEST NORTH TEMPLE
SALT LAKE CITY UT 84116


HAMILTON BROS. OIL CO.
HAMILTON FED. FISH LAKE #1-1
PROPOSED LOCATION
TOPO. MAP "B"
SCALE: 1" = 2000'
N
Mill Meadow Reservoir
SPILLWAY ELEV 7681
Springs
Creek
Salt
Gulch
SEVIER CO
WAYNE CO
T26S
T27S
CULVERT REQUIRED
PROPOSED ACCESS ROAD - 200'
Pole
Canyon
Sage
Flat
0.5 MILES
PROPOSED LOCATION HAMILTON FED. FISH LAKE #1-1
FREEMONT, UTAH 5.8 MILES
Teedee
Flat
Red
Hecto
Mormon
Fork
R R

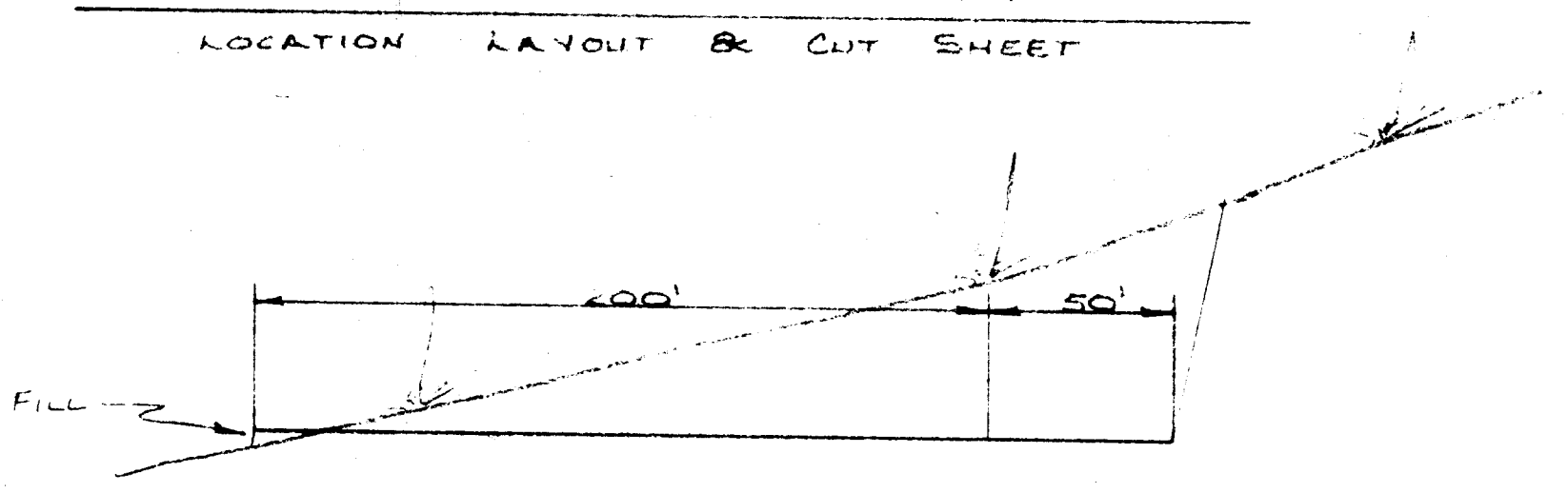


NOTE: THERE WILL BE A 4" GRAVEL BED REQUIRED ON THE LAST 0.5 MILES OF EXISTING ROAD & ALSO ON THE PROPOSED ACCESS ROAD; AS WELL AS THE LOCATION SITE.

HAMILTON BROTHERS OIL COMPANY

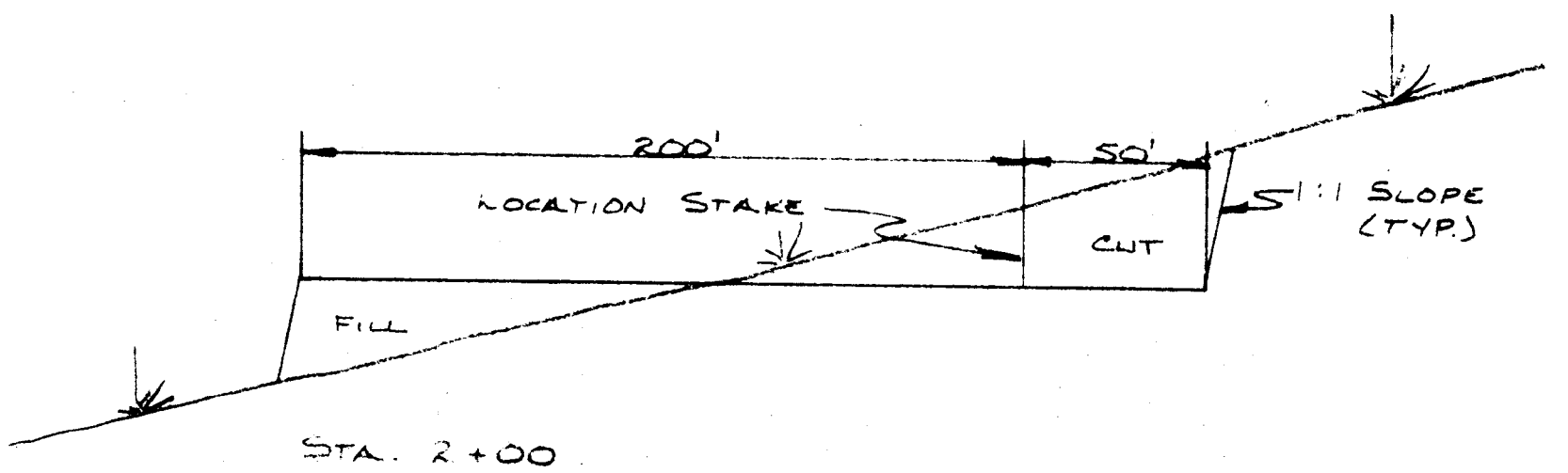
HAMILTON FED. FISH LAKE #1-1

LOCATION LAYOUT & CUT SHEET



STA. 0+00

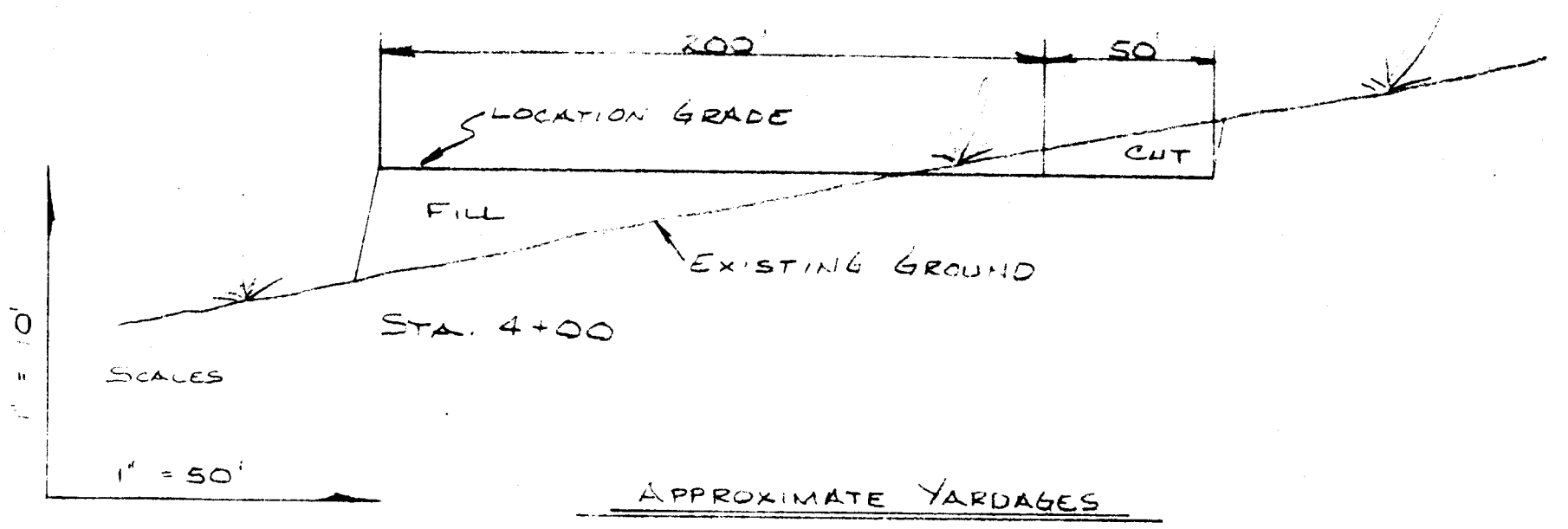
C-3 6
8191.56



C-1 8
8189.76'

STA. 2+00

F-6 5
8181.46'

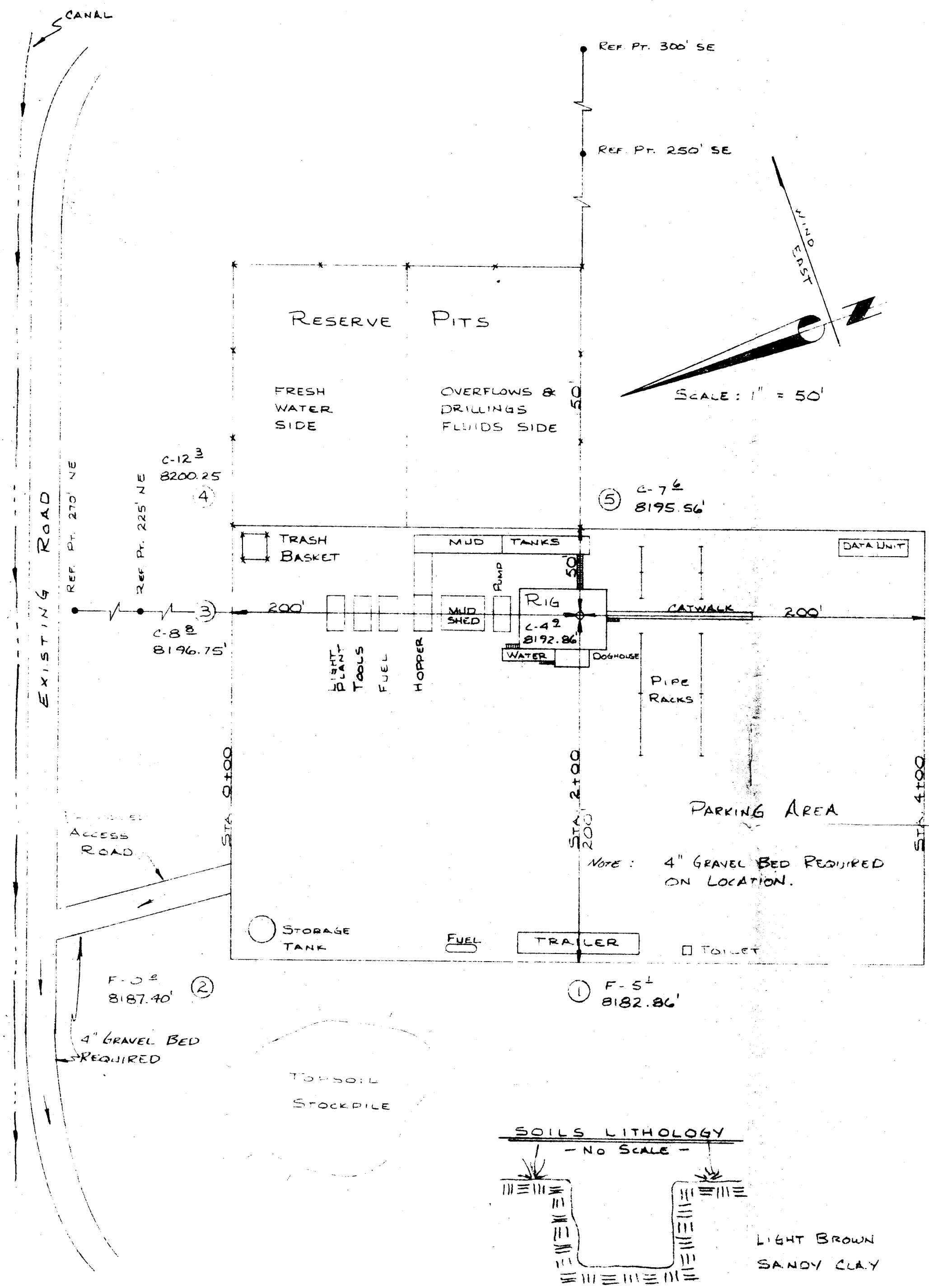


STA. 4+00

APPROXIMATE YARDAGES

CUBIC YARDS CUT - 9,513

CUBIC YARDS FILL - 8,459


CANAL
REF. PT. 300' SE
REF. PT. 250' SE
WIND
EAST
SCALE: 1" = 50'
RESERVE PITS
FRESH WATER SIDE
OVERFLOWS & DRILLINGS FLUIDS SIDE
50'
C-12 3
8200.25
4
5
C-7 6
8195.56'
REF. PT. 270' NE
REF. PT. 225' NE
EXISTING ROAD
TRASH BASKET
MUD TANKS
DATA UNIT
PUMP
50'
RIG
C-4 2
8192.86'
CATWALK
200'
200'
3
C-8 8
8196.75'
MUD SHED
LIGHT PLANT
TOOLS
FUEL
HOPPER
WATER
DOGHOUSE
PIPE RACKS
STA. 0+00
STA. 2+00
STA. 4+00
PARKING AREA
ACCESS ROAD
NOTE: 4" GRAVEL BED REQUIRED ON LOCATION.
STORAGE TANK
FUEL
TRAILER
TOILET
F-0 2
8187.40'
2
1
F-5 1
8182.86'
4" GRAVEL BED REQUIRED
TOPSOIL STOCKPILE
SOILS LITHOLOGY
- NO SCALE -
LIGHT BROWN SANDY CLAY

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
303-861-2456

TELEX
45-881

TELECOPIER
303-839-1024

March 30, 1981

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Attention: Mr. Mike Minder

Dear Mr. Minder:

Please find attached for your information a copy of our Designation of Operator form for the Hamilton Federal Fish Lake #1-1 in Utah.

Sincerely,

Ed Jurykovsky
Drilling Superintendent

EJ/ds

Attachment

RECEIVED
APR 2 1981
DIVISION OF
OIL, GAS & MINING

(UT-11704)

Form 9-1123
(Rev. Dec. 1957)

(Submit in triplicate to appropriate Regional Oil and Gas or Mining Supervisor)

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Richfield District, P.O. Box 768-Richfield, Utah 84701
SERIAL NO.: USA-U-18226

and hereby designates

NAME: Hamilton Brothers Oil Company
ADDRESS: 1625 Broadway, Suite 600
Denver, Colorado 80202

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 27 South, Range 3 East, SL Meridian
Section 1: Lots 1,2,3,&4, S/2 N/2, S/2 (All)
Wayne County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

MOBIL-TRANSOCEAN COMPANY

By .....
(Signature of lessee)
P. Moody, Attorney-in-Fact

March 6, 1981
(Date)

P.O. Box 5444, Denver, Colorado 80217
(Address)

U. S. GOVERNMENT PRINTING OFFICE 16—53598-1

RECEIVED
APR 2 1981
DIVISION OF
OIL, GAS & MINING

W013

** FILE NOTATIONS **

DATE: 5/15/81

OPERATOR: Hamilton Bros. Oil Company

WELL NO: Fish Lake 1-1

Location: Sec. 1 T. 27S R. 3E County: Wayne

File Prepared: ✓ Entered on N.I.D: ✓

Card Indexed: ✓ Completion Sheet: ✓

API Number 43-055-30030

CHECKED BY:

Petroleum Engineer:

Director: OK as per Rule C-3(c) topo exception as per map 7 page 5 13pt plan. Approval contingent upon ~~of adj oil & gas lease w/ wh 660' ft of location~~

Administrative Aide: ok as per C-3(c); Needs topo request. (too close to 'S' & 'E' bndry. line); ok on any other oil & gas wells

APPROVAL LETTER:

Bond Required: ☐ Survey Plat Required: ☐

Order No. Rule C-3 ☐ O.K. Rule C-3 ☐

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation Fed. Plotted on Map ☐

Approval Letter Written ✓

Hot Line ✓ P.I. ✓

June 4, 1981

Hamilton Brothers Oil Company
1600 Broadway, Suite 2600
Denver, Colorado 80202

Attention: Ed Jhrykovsky

Re: Well No. Federal Fish Lake 1-1
Sec. 1, T. 27S, R. 3E, NE SW
Wayne County, Utah

Insofar as this office concerned, approval to drill the above referred to o/g well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. However, this Division requires that a letter be sent to this office stating that Hamilton Bros. owns or controls the acreage within a 660' radius of the proposed well site, and a written statement as to the necessity of unorthodox location.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-055530030.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Cleon B. Feight

Cleon B. Feight
Director

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
TELEX 45-881
303-861-2456
TELECOPIER 303-839-1024

June 5, 1981

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Attention: Kathy Ostler

RE: Hamilton Fish Lake #1-1
Sec. 1, T27S, R3E
Wayne County, Utah

Dear Ms. Ostler:

We would like exception to rule C-3 (c) based on topographical reasons.

Regarding to rule C-3 (c) the location was skated 2214' East of West line and 1563' North of South line to avoid removal of timber, requested by the Department of Forest Service out of Loa, Utah.

Enclosed is a copy of Designation of Operator.

If you have any questions, please feel free to call the undersigned at (303) 861-2456.

Sincerely,

HAMILTON BROTHERS OIL COMPANY

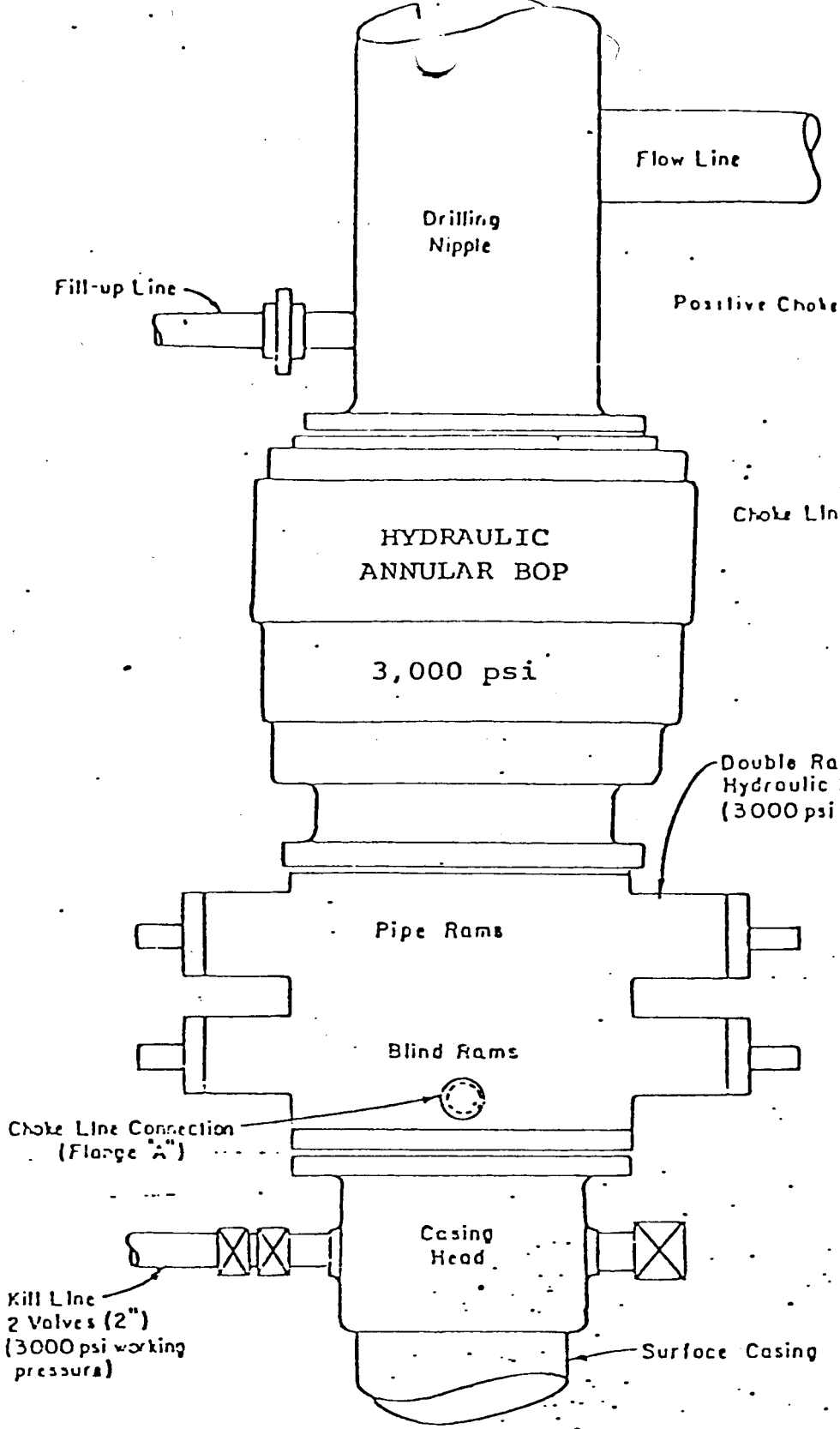
Ed Jurykovsky

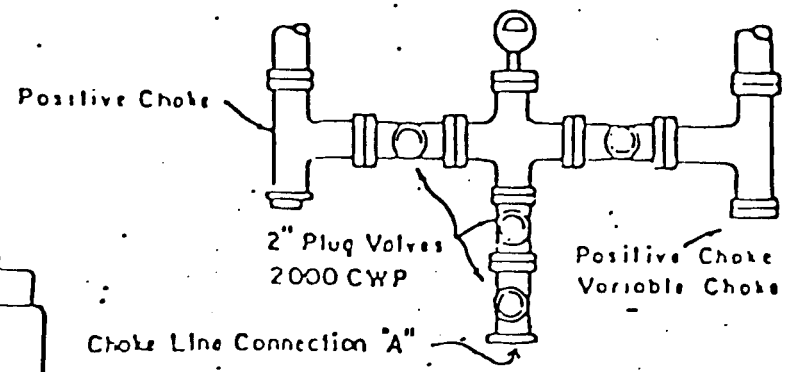
Ed Jurykovsky
Drilling Superintendent

EJ/ds

Enclosures

RECEIVED
JUN 8 1981
DIVISION OF
OIL, GAS & MINING





PLAN VIEW - CHOKE MANIFOLD

HAMILTON BROTHERS OIL COMPANY

NOTICE OF SPUD

New spud on file

Caller: -

Phone: -

Well Number: FEDERAL FISH LAKE 1-1

Location: NESW SECTION 1, T.27S., R.3E.

County: WAYNE State: UTAH

Lease Number: U-18226

Lease Expiration Date: OCTOBER 31, 1982

Unit Name (If Applicable): NA

Date & Time Spudded: JUNE 28, 1981

Dry Hole Spudder/Rotary: Rotary

Details of Spud (Hole, Casing, Cement, etc.)

SET SURF. @ 846' KB CIRCULATED CMT.

DRLG. AHEAD TSTG BOPs PIPE BLIND 1500#, HYDRIL 1000#

Rotary Rig Name & Number: VIERSON & COCHRAN #13

Approximate Date Rotary Moves In: NA

FOLLOW WITH SUNDRY NOTICE

Call Received By: RAH

Date: 7-16-81

Form OGC-1a

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL ☐ DEEPEN ☒ PLUG BACK ☐

b. Type of Well
Oil Well ☐ Gas Well ☐ Other Exploratory Single Zone ☐ Multiple Zone ☐

2. Name of Operator
Hamilton Brothers Oil Company

3. Address of Operator
1600 Broadway Denver, Colo. 80202

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface
2214 FWL and 1563 FSL of Sec.1, T27S, R3E, S.L.B.& M.

At proposed prod. zone

5. Lease Designation and Serial No.
U-18226

6. If Indian, Allottee or Tribe Name
NIL

7. Unit Agreement Name
Loa Unit

8. Farm or Lease Name
Fish Lake

9. Well No.
1-1

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area

12. County or Parrish 13. State
Wayne Uath

14. Distance in miles and direction from nearest town or post office* From Fremont northeast on Hwy #72, 5.8 miles, ½ mile east

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 1563'

16. No. of acres in lease 2508.32

17. No. of acres assigned to this well 640

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. NIL

19. Proposed depth 12,000

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
KB 8209' GL 8193'

22. Approx. date work will start*
11-3-81

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement

Hamilton Brothers Oil Company received a verbal approval from Mr. Bill Martens of the United States Department of The Interior, Geological Survey on November 3, 1981 to drill deeper on the Loa Unit. This well is currently running 2700' low. Estimated total depth is 12,000'. Currently drilling in Hermosa at 10,069, we propose to drill 200' through the Red Wall Limes, estimated depth at 11,800'. Please direct any correspondence to Reed Haddock. Thank You.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 11-3-81
BY: M.J. Minder

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
Signed E.J. Langkamp Title Drilling Superintendent Date 11-3-81

(This space for Federal or State office use)

Permit No. Approval Date

Approved by Title Date
Conditions of approval, if any:

*See Instructions On Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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.)

RECEIVED NOV 2 4 1981 DIVISION OF OIL, GAS & MINING

1. oil well ☐ gas well ☐ other

2. NAME OF OPERATOR
Hamilton Brothers Oil Company

3. ADDRESS OF OPERATOR
1600 Broadway Suite 2600, Denver, Co. 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE:
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: 11,400'

5. LEASE
U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NIL

7. UNIT AGREEMENT NAME
Loa Unit

8. FARM OR LEASE NAME
Fish Lake

9. WELL NO.
1-1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 1, T.27S, R.3E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
KB 8209'; GL 8193'

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Run Casing		

(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.)*

Received verbal approval from Mr. E. Guynn on November 17, 1981.

Run 5-1/2" 17# L-80 LT&C new casing set @ 9710'± K.B. to surface.

Casing to be cement with stage number one from casing shoe to DV tool, set @ 7900' K.B. Stage number two to be cement from DV tool to 500' up inside 9-5/8" casing set @ 5473' K.B.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 12-3-81
BY: [signature]

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Drilling Superintendent DATE 11-18-81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Vicky.

I suppose this well should be key entered and your memo routed to Dulu for update filming. As we discussed, wells with production which a later TA will present some problems, but this is probably a non producer.

[illegible]
4-10

T4

FISH LAKE 1-1 N3790

43055 30030 CMBRN 214 658 2690

12-21-81 compasTA RICH PHILLIPS

27S 3E 1

Hamilton Bros.

03/11/86 USDI * BUREAU OF LAND MANAGEMENT * UTAH STATE OFFICE PG 01

SERIAL REGISTER PAGE

GEO STATE: UTAH SERIAL NO: UTU 18226A
CASE TYPE: 311111 O&G-LEASE (NC PD)
LEGAL REF: O&G-LEASE (NC,PD): ACT 2/25/1920, 30 U COMMODITY: OIL & GAS

NAME	ADDRESS	% INTRST	INTEREST
MOBIL OIL CORP	BOX 5444 DENVER, CO 80217	100.00000	LESSEE

M_	TOWN	RANGE	SEC	SUBDIVISION	SURFACE MGMT AGENCY
26	27-0S	3-0E	1	S2N2,S2	
			1	LOT 1-4	
			3	S2N2,S2;(EXCL RESERV R/W)	
			3	LOT 1-4	

***** TOTAL ACRES: 1230.560 *****

ACTN DATE	CODE	ACTION	ACTION REMARKS	PEND ACT
11/01/1972	387	CASE ESTABLISHED		
11/01/1972	868	EFFECTIVE DATE		
05/01/1981	939	PARTIAL ASSIGNMENT APPVD FR U18226;		
09/15/1981	232	LEASE COMMITTED TO UNIT LOA;		
10/12/1982	260	260		

STATE	ENTITY	ACRES
	RICHFIELD DISTRICT USDI-BLM-UTAH	
	HOUSE RANGE RA	
	HENRY MOUNTAIN RA	
UTAH	WAYNE COUNTY UTAH	1230.560

CASE DISPOSITION: 11/01/1972 AUTHORIZED

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

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 "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NIL

1. OIL WELL ☐ GAS WELL ☐ OTHER Shut in - productive CO_2 well

7. UNIT AGREEMENT NAME: Loa Unit

2. NAME OF OPERATOR: Hamilton Brothers Oil Company

8. FARM OR LEASE NAME: Fish Lake

3. ADDRESS OF OPERATOR: 1600 Broadway, Suite 2600, Denver, Colorado 80202

9. WELL NO.: 1-1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 2214' FWL & 1563' FSL of Sec. 1, T27S, R3E

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T27S, R3E S.L. B

14. PERMIT NO.: 43-055-30030

15. ELEVATIONS (Show whether DF, RT, GR, etc.): GL 8193'; KB 8209'

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Production Testing			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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.)*

TD: 11,400'; PBTD: 9572'
Perforations 9473'-9516'; Zone #1, Lower Elbert.
Recovered 116.98 bbls clear H_2O w/CO_2 Gas cut; 14.6225 BPH. Cement w/50 sxs Class H, squeezed off @ 5000 psi w/30 sxs in formation and 20 sxs in csg. Cement top @ 9293'.

PBTD: 9293'
Perforations 9020'-9080'; Zone #2 Ouray
Recovered 9 bbls drilling mud and 52 bbls clear H_2O w/CO_2 gas-cut. 4.3 BPH. Cement w/40 sxs Class H, squeezed 18 sxs into formation, 2 sxs in csg. Cement top @ 8820'.

PBTD: 8820'
Perforations 8554'-8596'; Zone #3 Red Wall
Swabbed total of 100 bbls of fresh water w/CO_2 cut. Avg of 11.4 BPH from 5200'. Squeezed off perforations 8554'-8596' w/100 sxs cement; locked up @ 5000 psi w/cement top @ 8081' w/50 sxs into formation.

Continued on additional Page.

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

SIGNED [signature] TITLE Drilling Superintendent DATE 1-6-82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

PBTD: 8081'
Perforations 7678'-7706'; Zone #4 Hermosa
Measured flow rate through 2" orifice w/11 psi and 80 psi tubing pressure @ 4.2 MMCF/D w/heavy water spray.
Temporarily abandon Zone #4, 7678'-7706' w/drillable cast iron bridge plug set @ 7670', 2 sxs cement top @ 7660'.

PBTD: 7660'
Perforations 7596'-7640'; Zone #5 Hermosa
Swabbing well, total of 100 bbls fresh water heavy cut w/CO_2. Entry rate 15.4 BPH.
Teporarily abandon Zone #5, 7596'-7640' w/drillable cast iron plug set @ 7586' w/2 sxs cement on top @ 7578'.

PBTD: 7578'
Perforations 6850'-6908'; Zone #6 Coconino
Swabbed load water + 110 bbls of formation water, 10,000 PPM chl w/entry rate of 18 BPH. Heavy cut w/CO_2. Well started to flow. Clean to pit and flowed through test seperator @ .510 MMCF/D w/40 bbls fresh water/hr. 60 psi flowing pressure.
Temporarily abandon Zone #6, Coconino 6850'-6908' w/drillable cast iron plug set @ 6830' + 4 sxs cement. Cement top @ 6814'. Tested plug to 3000 psi.

PBTD: 6814'
Perforations 6530'-6564'; Zone #7 Kaibab
Flow well through seperator @ 3.873 MMCF/D w/5.5 BPH of fresh wtr w/320 psi tubing pressure on 48/64" choke.
Temporarily abandon Zone #7 Kaibab 6530'-6564' w/drillable cast iron plug set @ 6500' + 6 sxs cement on top @ 6480'.

PBTD: 6480'
Perforations 6390'-6450'; Zone #8 Kaibab
Flow well through test unit @ 5.486 MMCF/D w/no water w/360 psi tubing pressure on 96/64" choke.
Temporarily abandon Zone #8, 6390'-6450' Kaibab w/drillable cast iron plug set @ 6380'. Dumped 8 sxs cement on top. Top of cement @ 6370' PBD. Pressured plug to 1000 psi - held OK.

PBTD: 6370'
Perforations 6288'-6336'; Zone #9 Kaibab
Flow well through test unit @ 2.328 MMCF/D w/4.2 BPH of fresh water w/160 psi flowing pressure on 112/64" choke.
Temporarily abandon Zone #9, 6288'-6336' Kaibab w/drillable cast iron bridge plug set @ 6278'. Cemented w/6 sxs, top @ 6250'.

Rig released 6:30 PM, 12/21/81.

Status: Shut in productive CO_2 well.

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
303-861-2456
TELEX
45-88
TELECOPIER
303-839-1024

January 7, 1982

United States Department of Interior
Geological Survey
Conservation Division
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104-3884

RE: Hamilton Fish Lake #1-1
Section 1, T27S, R3E, S.L. B&M
Wayne County, Utah

Dear Sirs:

We are requesting confidential status for the above-mentioned well, including all logs and information we provide you with. If you have any questions, please feel free to call me at (303) 861-2456.

Sincerely,

Ed Jurykovsky

Ed Jurykovsky
Drilling Superintendent

EJ/pf

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
TELEX 45-881
303-861-2456
TELECOPIER 303-839-1024

January 8, 1982

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

RECEIVED
JAN 13 1982
DIVISION OF
OIL, GAS & MINING

RE: Hamilton Fish Lake #1-1
Section 1, T27S, R3E, S.L. B&M
Wayne County, Utah

Dear Sirs:

Enclosed please find a copy of the letter sent to the U.S.G.S., dated January 7, 1982, requesting confidential status for the above-mentioned well. If you have any questions, please feel free to call me at (303) 861-2456.

Sincerely,

Ed Jurykovsky

Ed Jurykovsky
Drilling Superintendent

EJ/pf

Enclosure

Dec. 1973

Budget Bureau No. 42-R1424

UNITED STATES

CONFIDENTIAL

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 Shut in - prod CO_2 well

2. NAME OF OPERATOR
Hamilton Brothers Oil Company

3. ADDRESS OF OPERATOR
1600 Broadway, Suite 2600, Denver, CO 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 2214' FWL & 1563' FSL of Sec.1,
AT TOP PROD. INTERVAL: T27S, R3E
AT TOTAL DEPTH:

5. LEASE
18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NIL

7. UNIT AGREEMENT NAME
Loa Unit

8. FARM OR LEASE NAME
Fish Lake

9. WELL NO.
1-1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec.1, T27S, R3E, S.L.B.&M.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
GL 8193'; KB 8209'

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Production Test		

(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.)*

TD: 11,400'; PBTD: 9572'
Perfs 9473'-9516'; Zone #1, Lower Elbert
Rec 116.98 bbls clear H_2O w/CO_2 gas-cut; 14.6225 BPH. Cmt w/50 sxs Cl H, sqzd off @ 5000 psi w/30 sxs in fm & 20 sxs in csg. Cmt top @ 9293'.

PBTD: 9293'
Perfs 9020'-9080'; Zone #2, Ouray
Rec 9 bbls drlg mud & 52 bbls clear H_2O w/CO_2 cut. 4.3 BPH. Cmt w/40 sxs Cl H, sqzd 18 sxs into fm, 2 sxs in csg. Cmt top @ 8820'.

Continued on additional page.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Drlg. Supt. DATE 1-6-82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Attachment - Form OGC-3 - Hamilton Fish Lake #1-1, Wayne County, Utah

TESTED INTERVALS:

TD: 11,400'; PBTD: 9572'
Perfs 9473'-9516'; Zone #1, Lower Elbert
Rec 116.98 bbls clear H_2O w/CO_2 gas-cut; 14.6225 BPH. Cmt w/50 sxs Cl H, sqz'd off @ 5000 psi w/30 sxs in fm & 20 sxs in csg. Cmt top @ 9293'.

PBTD: 9293'
Perfs 9020'-9080'; Zone #2, Ouray
Rec 9 bbls drlg mud & 52 bbls clear H_2O w/CO_2 cut; 4.3 BPH. Cmt w/40 sxs Cl H, sqz'd 18 sxs into fm, 2 sxs in csg. Cmt top @ 8820'.

PBTD: 8820'
Perforations 8554'-8596'; Zone #3, Red Wall
Swabbed total of 100 bbls of fresh water w/CO_2 cut. Avg of 11.4 BPH from 5200'. Sqzd off perfs 8554'-8596' w/100 sxs cmt; locked up @ 5000 psi w/cmt top @ 8081' w/50 sxs into formation.

PBTD: 8081'
Perforations 7678'-7706'; Zone #4 Hermosa
Measured flow rate through 2" orifice w/11 psi and 80 psi tubing pressure @ 4.2 MMCF/D w/heavy water spray.
Temporarily abandon Zone #4, 7678'-7706' w/drillable cast iron bridge plug set @ 7670', 2 sxs cement top @ 7660'.

PBTD: 7660'
Perforations 7596'-7640'; Zone #5 Hermosa
Swabbing well, total of 100 bbls fresh water heavy cut w/CO_2. Entry rate 15.4 BPH. Teporarily abandon Zone #5, 7596'-7640' w/drillable cast iron plug set @ 7586' w/2 sxs cement on top @ 7578'.

PBTD: 7578'
Perforations 6850'-6908'; Zone #6 Coconino
Swabbed load water + 110 bbls of formation water, 10,000 PPM chl w/entry rate of 18 BPH. Heavy cut w/CO_2. Well started to flow. Clean to pit and flowed through test seperator @ .510 MMCF/D w/40 bbls fresh water/hr. 60 psi flowing pressure.
Temporarily abandon Zone #6, Coconino 6850'-6908' w/drillable cast iron plug set @ 6830' + 4 sxs cement. Cement top @ 6814'. Tested plug to 3000 psi.

PBTD: 6814'
Perforations 6530'-6564'; Zone #7 Kaibab
Flow well through seperator @ 3.873 MMCF/D w/5.5 BPH of fresh wtr w/320 psi tubing pressure on 48/64" choke.
Temporarily abandon Zone #7 Kaibab 6530'-6564' w/drillable cast iron plug set @ 6500' + 6 sxs cement on top @ 6480'.

PBTD: 6480'
Perforations 6390'-6450'; Zone #8 Kaibab
Flow well through test unit @ 5.486 MMCF/D w/no water w/360 psi tubing pressure on 96/64" choke.
Temporarily abandon Zone #8, 6390'-6450' Kaibab w/drillable cast iron plug set @ 6380'. Dumped 8 sxs cement on top. Top of cement @ 6370' PBD. Pressured plug to 1000 psi -held OK.

PBTD: 6370'
Perforations 6288'-6336'; Zone #9 Kaibab
Flow well through test unit @ 2.328 MMCF/D w/4.2 BPH of fresh water w/160 psi flowing pressure on 112/64" choke.
Temporarily abandon Zone #9, 6288'-6336' Kaibab w/drillable cast iron bridge plug set @ 6278'. Cemented w/6 sxs, top @ 6250'.

Rig released 6:30 PM, 12/21/81.
Status: Shut in productive CO_2 well.

CONFIDENTIAL

PBTD: 8820'
Perforations 8554'-8596'; Zone #3, Red Wall
Swabbed total of 100 bbls of fresh water w/CO_2 cut. Avg of 11.4 BPH from 5200'. Sqzd off perfs 8554'-8596' w/100 sxs cmt; locked up @ 5000 psi w/cmt top @ 8081' w/50 sxs into formation.

PBTD: 8081'
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Measured flow rate through 2" orifice w/11 psi and 80 psi tubing pressure @ 4.2 MMCF/D w/heavy water spray.
Temporarily abandon Zone #4, 7678'-7706' w/drillable cast iron bridge plug set @ 7670', 2 sxs cement top @ 7660'.

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Temporarily abandon Zone #7 Kaibab 6530'-6564' w/drillable cast iron plug set @ 6500' + 6 sxs cement on top @ 6480'.

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PBTD: 6370'
Perforations 6288'-6336'; Zone #9 Kaibab
Flow well through test unit @ 2.328 MMCF/D w/4.2 BPH of fresh water w/160 psi flowing pressure on 112/64" choke.
Temporarily abandon Zone #9, 6288'-6336' Kaibab w/drillable cast iron bridge plug set @ 6278'. Cemented w/6 sxs, top @ 6250'.

Rig released 6:30 PM, 12/21/81.

Status: Shut in productive CO_2 well.

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

May 12, 1982

Hamilton Brothers Oil Company
1600 Broadway
Denver, Colorado 80202

Re: Well No. Hamilton Fish Lake #1-1
Sec. 1, T. 27S, R. 3E.
Wayne County, Utah
(December 1981- April 1982)

Gentlemen:

Our records indicate that you have not filed the monthly drilling reports for the months indicated above on the subject well.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. Thsi report may be filed on Form OGC-1B, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

Board/Charles R. Henderson, Chairman • John L. Bell • E. Steele McIntyre • Edward T. Beck
Robert R. Norman • Margaret R. Bird • Herm Olsen

an equal opportunity employer • please recycle paper

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
303-861-2456
TELEX 45-881
TELECOPIER 303-839-1024

May 24, 1982

State of Utah
Natural Resources & Energy
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
MAY 27 1982
DIVISION OF
OIL, GAS & MINING

Attention: Cari Furse

RE: Your letter dated 5/12/82
Hamilton Fish Lake #1-1
Sec. 1, T27S, R3E
Wayne County, Utah

Enclosed please find a copy of our final Sundry Notice dated 1/6/82, which we had previously sent to your office. Note that on 12/21/81 the rig was released and operations stopped on that date.

If there are any further questions, please feel free to call at (303) 861-2456.

Sincerely,

Ed Jurykovsky

Ed Jurykovsky
Drilling Superintendent

Enclosure

EJ/pf

Hamilton Brothers Oil Company
Rocky Mountain Division
1625 Broadway, Suite 600
Denver, Colorado 80202
303/572-3391

June 28, 1982

United States Department of the Interior
Geological Survey
P. O. Box 25046 MS609
Denver Federal Center
Denver, Colorado 80225

Attention: Mr. John Schroyer

RE: Loa Federal Unit
Wayne and Sevier Counties, Utah

Gentlemen:

The test well drilled under the terms of the subject unit, Hamilton Brothers Oil Company #1-1 Fishlake, located in NE/4SW/4 Section 1 T-27S, R-3E Wayne County, Utah, was completed as a shut in CO_2 gas well on January 6, 1982. (Copy of completion report attached.)

Since the completion date of this well, we have been diligently attempting to find a market for this gas. We have been talking to operators of oil fields in Eastern Utah, Western Colorado, and Southwestern Wyoming to determine whether we could sell our carbon dioxide to them for use in secondary recovery operations in fields they operate.

It appears that the Loa Unit well is located further away from existing fields whose production could be enhanced by injecting CO_2 than any other CO_2 well in Utah. This increases the difficulty in establishing a market, particularly during times when money is in tight supply. In spite of this we have found companies interested in the product. Apparently one big problem is the large deliverability and reserve of CO_2 needed, which our estimates indicate could not be met by the Loa Unit alone.

Consideration is now being given to determining whether there may be sufficient CO_2 supplies in other reserves in the area which together with our Loa Unit could furnish the amounts needed.

In view of the high costs involved in drilling wells in this area (the subject well cost over $4,500,000) and in transporting the product, it is essential that we have more information as to the availability of a market for the CO_2 before more wells are drilled in the unit area. Also, we need more information of this nature before we can file an adequate application for paying well determination.

In view of the above, we are writing to request an extension until February 1, 1983, of the six month period during which under Article 10 of the Unit Agreement, we are required to file a plan of development and operation.

Sincerely,

P. B. Abbey
Landman
Rocky Mountain Division

PBA/sl
Attachments

cc: Mr. Mike Minder
Division of Oil, Gas, & Mining
State of Utah
1588 W. North Temple
Salt Lake City, Utah 84116

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

September 23, 1982

Hamilton Brothers Oil Company
1625 Broadway, Suite 600
Denver, Colorado 80202

Re: Well No. Hamilton Lake #1-1
Sec. 1, T. 27S, R. 3E.
Wayne County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

CF/cf
Enclosure

Board/Charles R. Henderson, Chairman • John L. Bell • E. Steele McIntyre • Edward T. Beck
Robert R. Norman • Margaret R. Bird • Herm Olsen

an equal opportunity employer • please recycle paper

HAMILTON BROTHERS OIL COMPANY
1600 BROADWAY
DENVER, COLORADO 80202
303-861-2456
TELEX 45-881
TELECOPIER 303-839-1024

September 30, 1982

Cari Furse
State of Utah
Natural Resources & Energy
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
OCT 04 1982
DIVISION OF
OIL, GAS & MINING

RE: Hamilton Fish Lake #1-1
Sec. 1, T27S, R3E
Wayne County, Utah

Dear Ms. Furse:

Enclosed please find two (2) copies of Form OGC-3 for the above-mentioned well per your request.

We apologize for the delay in filling this form and for any inconvenience caused. If you have any questions or need any further information, please feel free to call.

Sincerely,

Ed Jurykovsky
Drilling Superintendent

paf

Enclosure

Form 9-331
Dec. 1973

CONFIDENTIAL

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NIL

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.)

7. UNIT AGREEMENT NAME
Loa Unit

8. FARM OR LEASE NAME
Fish Lake

1. oil well ☐ gas well ☐ other Shut-in CO_2 gas well.

9. WELL NO.
1-1

2. NAME OF OPERATOR
Hamilton Brothers Oil Company

10. FIELD OR WILDCAT NAME
Wildcat

3. ADDRESS OF OPERATOR
1600 Broadway, PO Box 5870, Denver, C) 80217

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 1, T27S, R3E, S.L.B.& M.

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 2214' FWL & 1563' FSL of Sec. 1.
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

12. COUNTY OR PARISH: Wayne
13. STATE: Utah

14. API NO.

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

15. ELEVATIONS (SHOW DF, KDB, AND WD)
GL 8193'; KB 8209'

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Restore location.		

RECEIVED
OCT 15 1982
DIVISION OF
OIL, GAS & MINING

(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.)*

1. Restored location; approved by District Forest Service.

2. Seeding of location will be completed by October 31, 1982.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Ed Lumpkin TITLE Drlg. Supt. DATE 10/12/82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Well file:
Well No. Fish Lake 1-1
Sec 1, T21S, R5E
Wayne Co.

Hamilton Brothers Oil Company
Rocky Mountain Division
1625 Broadway, Suite 600
Denver, Colorado 80202
303/572-3391

RECEIVED
JAN 20 1983
DIVISION OF
OIL GAS & MINING

January 12, 1983

United States Department of the Interior
Geological Survey
P. O. Box 25046 MS609
Denver Federal Center
Denver, Colorado 80225

Attention: Mr. John Schroyer

Re: Loa Federal Unit
Wayne and Sevier Counties, Utah

Gentlemen:

On June 28, 1982, we wrote you requesting an extension until February 1, 1983 of the six month period during which we are required to file a plan of development and operation. We asked for this extension of time so that we could obtain information as to the availability of a market for CO_2 before electing to drill more wells.

On July 21, 1982, you granted us this extension, pointing out that prior to our filing a Plan of Development, we should file an application for paying well determination and participating area.

In our efforts to find a market for our CO_2, our primary efforts were directed towards locating an oil company that might be interested in purchasing our CO_2 for enhancing recovery in existing oil fields. While there are fields to which our CO_2 could be transported for secondary recovery, none of the operators have completed plans to inject CO_2 at this time.

We have now entered into negotiations with a firm in Salt Lake City who is interested in transporting CO_2 by truck for commercial purposes. At this time we are developing the economics of this venture to determine whether it is feasible, and whether we could afford to drill additional wells in the Loa Unit for this market. After we have developed this information we will determine whether a mutually beneficial agreement can be made.

In view of the above, we are writing to [redacted] in which to file our application for paying well determination.

Sincerely,

HAMILTON BROTHERS OIL COMPANY

Peter B. Abbey

Peter B. Abbey
Division Landman

PBA/br

cc: Mr. Mike Minder
Division of Oil, Gas, & Mining
State of Utah
1588 W. North Temple
Salt Lake City, Utah 84116

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 22, 1983

Hamilton Brothers Oil Company
1600 Broadway
P. O. Box # 5870
Denver, Colorado 80217

Re: Well No. Fish Lake # 1-1
Sec. 1, T. 27S, R. 3E.
Wayne County, Utah

Gentlemen:

The above referred to well has been currently under a temporarily abandoned status for six months or longer. Would you be kind enough to inform this office of a change in status, or let us know if it is still temporarily abandoned, submitted on a Sundry Notice (Form OGC-1B, enclosed).

Thank you for your prompt attention to the above submittal.

Respectfully,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Well Records Specialist

CF/cf
Enclosure

Board/Charles R. Henderson, Chairman • John L. Bell • E. Steele McIntyre • Edward T. Beck
Robert R. Norman • Margaret R. Bird • Herm Olsen

an equal opportunity employer • please recycle paper

Form OGC-1b

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

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 "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NIL

1. OIL WELL ☐ GAS WELL ☐ OTHER: Shut-in Gaseous CO_2 Well.

7. UNIT AGREEMENT NAME: Loa Unit

2. NAME OF OPERATOR: Hamilton Brothers Oil Company

8. FARM OR LEASE NAME: Fish Lake

3. ADDRESS OF OPERATOR: 1600 Broadway, P.O. Box 5870, Denver, Colorado 80217

9. WELL NO.: 1-1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 2214' FWL & 1563' FSL of Sec. 1, T27S, R3E

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T27S, R3E. S.L.B.& M.

14. PERMIT NO.: 43-055-30030

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 8209' K.B.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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.)*

PRESENT STATUS:

Negotiating CO_2 purchase contract with AmeriGas.

RECEIVED
MAY 02 1983
DIVISION OF
OIL, GAS & MINING

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

SIGNED Ed Humphrey TITLE Drilling Superintendent DATE 4-29-83

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Well file:
Well No. Fish Lake 1-1
Sec. 1, T21S, R3E
Wayne Co.

Hamilton Brothers Oil Company
Rocky Mountain Division
1625 Broadway, Suite 600
Denver, Colorado 80202
303/572-3391

July 22, 1983

United States Department of the Interior
Geological Survey
P.O. Box 25046 MS609
Denver Federal Center
Denver, Colorado 80225

Attn: Mr. John Schroyer

Re: Loa Federal Unit
Wayne and Sevier Counties, Utah

Gentlemen:

In January, 1983, you granted us an extension until August 1, 1983, to file an application for a paying well determination or continue drilling operations. This was granted in response to our letter of January 12, 1983, in which we advised that we were negotiating with a firm in Salt Lake City who would transport the CO_2 from the well by truck to commercial markets. We are still negotiating with this firm and were confident of reaching an agreement when they determined that the rate the local power company proposed to charge for electricity for the plant that would be needed was so high that the project would not be economical. Discussions are still continuing with the power company and efforts are being made to determine whether there is another source of electricity in the area.

We believe that we will know one way or the other quite soon whether or not we will be able to process the CO_2 from the Loa Unit. In view of this, we ask that you please grant us an extension until February 1, 1984 in which to file our application for paying well determination.

Very truly yours,

HAMILTON BROTHERS OIL COMPANY

P. B. Abbey
Division Land Manager

PBA:kl

cc: Mr. Mike Minder
Division of Oil, Gas & Mining
State of Utah
1588 W. North Temple
Salt Lake City, Utah 84116

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

October 25, 1983

Hamilton Brothers Company
1600 Broadway
P. O. Box 5870
Denver, Colorado 80217

Re: Well No. Fish Lake # 1-1
1563' FSL, 2214' FWL
NE SW, Sec. 1, T. 27S, R. 3E.
Wayne County, Utah

Gentlemen:

The above referred to well has been currently under a temporarily abandoned status for six months or longer. Would you be kind enough to inform this office of a change in status, or let us know if it is still temporarily abandoned, submitted on a Sundry Notice (Form OGC-1B, enclosed).

If this well has been completed as producing, shut-in, injection, gas storage or plugged and abandoned, please submit a Well Completion Form (OGC-3), stating the procedure of the completed operations.

Thank you for your prompt submittal to the above requested matter.

Respectfully,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Well Records Specialist

CF/cf
Enclosures

Form OGC-1b

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

File

TATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

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 "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NIL

1. OIL WELL ☐ GAS WELL ☐ OTHER: Shut-in Gaseous CO_2 Well.

7. UNIT AGREEMENT NAME: Loa Unit

2. NAME OF OPERATOR: Hamilton Brothers Oil Company

8. FARM OR LEASE NAME: Fish Lake

3. ADDRESS OF OPERATOR: 1600 Broadway, P.O. Box 5870, Denver, Colorado 80217

9. WELL NO.: 1-1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 2214' FWL & 1563' FSL of Section 1, T27S, R3E

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 1, T27S, R3E S.L.B.& M.

14. PERMIT NO.: 43-055-30030

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 8209' K.B.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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.)*

PRESENT STATUS:

Negotiating CO_2 purchase contract with AmeriGas.

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

SIGNED Ed Lamphouslay TITLE Drilling Superintendent DATE November 8, 1983

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Hamilton Brothers Oil Company
1600 Broadway
P. O. Box 5870
Denver, Colorado 80217
303/861-2456

November 8, 1983

Cari Furse
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Hamilton Fish Lake #1-1
1563' FSL & 2214' FWL
NE SW Section 1, T27S, R3E
Wayne County, Utah

Dear Ms. Furse:

Per your request of October 25, 1983, please find enclosed a sundry notice for the above-referenced well stating its current status. Should this status change in the future, we will send an updated notice.

If you need any further information or if we can be of further assistance, please feel free to call or write.

Best regards,

Pamela French

Pamela French
Drilling Secretary

pf

Enclosure

RECEIVED
NOV 10 1983
DIVISION OF
OIL, GAS & MINING

Telex: 45-881 Telecopier 303/839-1024

Well file:
Well No. Fish Lake 1-1
Sec. 1, T27S, R3E
Wayne Co.

Hamilton Brothers Oil Company
Northern Region
1625 Broadway, Suite 600
Denver, Colorado 80202
303/572-3391

November 30, 1983

United States Department of the Interior
Bureau of Land Management
136 East South Temple
Salt Lake City, Utah 84111

Attn: E. W. Guynn
Chief, Branch of Fluid Minerals

Re: Loa Unit
Wayne and Sevier Counties, Utah

Gentlemen:

We have received your letter of November 22, 1983 advising that you plan to terminate the Loa Unit effective August 1, 1983. We attach copy of letter dated July 22, 1983 that we sent to Mr. Schroyer of your Denver office, requesting an extension of the unit until February 1, 1984. We were advised that this letter was forwarded to you.

The people to whom we hope to sell our CO_2 are still held up by the high cost of power but still beleive that there is a chance to resolve this problem. Also, earlier this month we were contacted by a representative of Northwest Pipeline about their plan to gather and transport CO_2 to California for use in recovering additional oil from California oil fields. We are meeting with a representative of Northwest Pipeline tomorrow.

In view of the above, we ask that you please consider request of July 22, 1983 to extend the unit.

Yours very truly,

HAMILTON BROTHERS OIL COMPANY

P. B. Abbey
Division Land Manager

PBA:kll
attachment

~~cc: Mr.~~ Mike Minder
Division of Oil, Gas & Mining

RECEIVED

DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 5, 1986

TO: Well File Memo

FROM: J.R. Baza JRB

RE: Well No.Fishlake 1-1, Sec.1, T.27S, R.3E, Wayne County, Utah

This well is properly designated as temporarily abandoned. According to Teresa Thompson of the Salt Lake BLM office, the BLM has ongoing discussions with Hamilton Brothers Oil Company regarding the status of this well and the Loa Unit in which this well is located. She will forward copies of correspondence to us for filing.

sb
0265T-14

John - from
Richfield BLM
will send copy
of Oper Chng.
3-11-86
VC
eff 5-1-81
U3790 Mobil

N7330

Hamilton Brothers Oil Company
Northern Region
1625 Broadway, Suite 600
Denver, Colorado 80202
303/572-3391

1984 MAY 16 PM 3:52

May 15, 1984

RECEIVED
MAR 06 1986
DIVISION OF
OIL, GAS & MINING

Mr. Ed W. Guynn
Chief, Branch of Fluid Minerals
United States Department of the Interior
Bureau of Land Management
136 East South Temple
Salt Lake City, Utah 84111

Re: Fishlake/Antimony Prospect (UT-006)
Application for Determination of Paying Well
Loa Unit, 1-1 Fishlake Well (UT-246)
Wayne and Sevier Counties, Utah

Dear Mr. Guynn:

Reference is made to our telephone conversation of May 7, 1984, during which we discussed the above captioned unit. Thank you for your time, cooperation and willingness to work with Hamilton Brothers in resolving the problems connected with said unit.

In accordance with our discussion, we have advised our Production Department that the Loa Unit has not been officially terminated and have requested them to prepare an Application for Determination of Paying Well. We will forward it to you as soon as it is available.

Thank you again for your cooperation and assistance in this matter.

Very truly yours,

HAMILTON BROTHERS OIL COMPANY

J. C. Spradlin

J. C. Spradlin
Northern Division Land Manager

JCS:CC:pkm

3180
(U-922)

August 5, 1985

Hamilton Brothers Oil Company
1600 Broadway
P.O. Box 5870
Denver, Colorado 80217

Gentlemen:

We have reviewed your application for paying well status on Fishlake Well No. 1-1 NESW Section 1, T. 27 S., R. 3 E., SLM, Wayne County, Utah, for the referenced unit. According to your computations, Well No. 1-1 will not pay out using present worth discounted at 15 percent. However, there are a couple of factors that can be considered when applying for a paying well determination. The first factor is to use an estimated cost of drilling and completing a production well instead of the actual cost associated with the original exploratory test and the second factor is to evaluate other zones present in the Kaibab Formation with respect to increasing productive capabilities of Well No. 1-1 even though significant water production will be encountered. Taking these additional items into consideration in making a determination of a paying well for the Loa Unit will be significant in reducing the negative present worth.

Please resubmit your paying well application incorporating the additional factors. If you need further information or explanation, do not hesitate to contact this office. Your cooperation in this matter is appreciated.

Sincerely,

R. A. Henricks
Acting Chief,
Branch of Fluid Minerals

bcc: Loa Unit File
Agr. Sec. Chron
Fluid Chron

RAHenricks:jw:8/5/85:X3023
HAMILTON

POSTED
FID-175

Hamilton Oil Corporation
1560 Broadway, Suite 2000
Denver, Colorado 80202

1985 DEC -3 AM 10:00

December 2, 1985

United States Department of the Interior
Bureau of Land Management
Utah State Office
324 South State, Suite 301
Salt Lake City, Utah 84111-2303

Attention: Mr. R. A. Henricks,
Acting Chief,
Branch of Fluid Minerals

Re: 3180 (U-922)

Gentlemen:

Per your request of August 5, 1985, we have reviewed our economic analysis of the Fish Lake CO_2 Prospect in Wayne County, Utah. You suggested in your previous transmittal that we base our paying well analysis on costs associated with a development as opposed to an exploratory well. This has been done. You further suggest that other zones in the Kaibab might be considered in an effort to increase productivity. However, due to the low CO_2 flow rates and levels of freshwater production seen in the other intervals, they have been discounted. We have completed the economics on a 100% working interest basis utilizing a dry hole cost of $1,020,500 and a completed well cost of $1,362,000. We have not included in the economics the cost of any processing plant that might be required on the assumption that the CO_2 contractor would build and furnish such plant.

From the standpoint of CO_2 pricing, we were unsuccessful in determining a current market value for CO_2 in Wayne County. We have therefore prepared this economic analysis and the attached graph on the basis of a pricing sensitivity. The prices that we have utilized range from 25¢ per MCF to a maximum of 75¢ per MCF. All prices and cost parameters in the economic analysis are unescalated. As we are further assuming that this would be a development well, a 75% chance of success was assumed. The results of this analysis reveal that a minimum price of 54¢ per MCF would be required to

Telex: 45-881 Telecopier 303/839-1024

provide a minimum acceptable rate of return for a project of this type. We trust that the economic analysis will fulfill your request for the evaluation of a paying well status in this prospect.

If we can be of further assistance or if you require additional information, please do not hesitate to call.

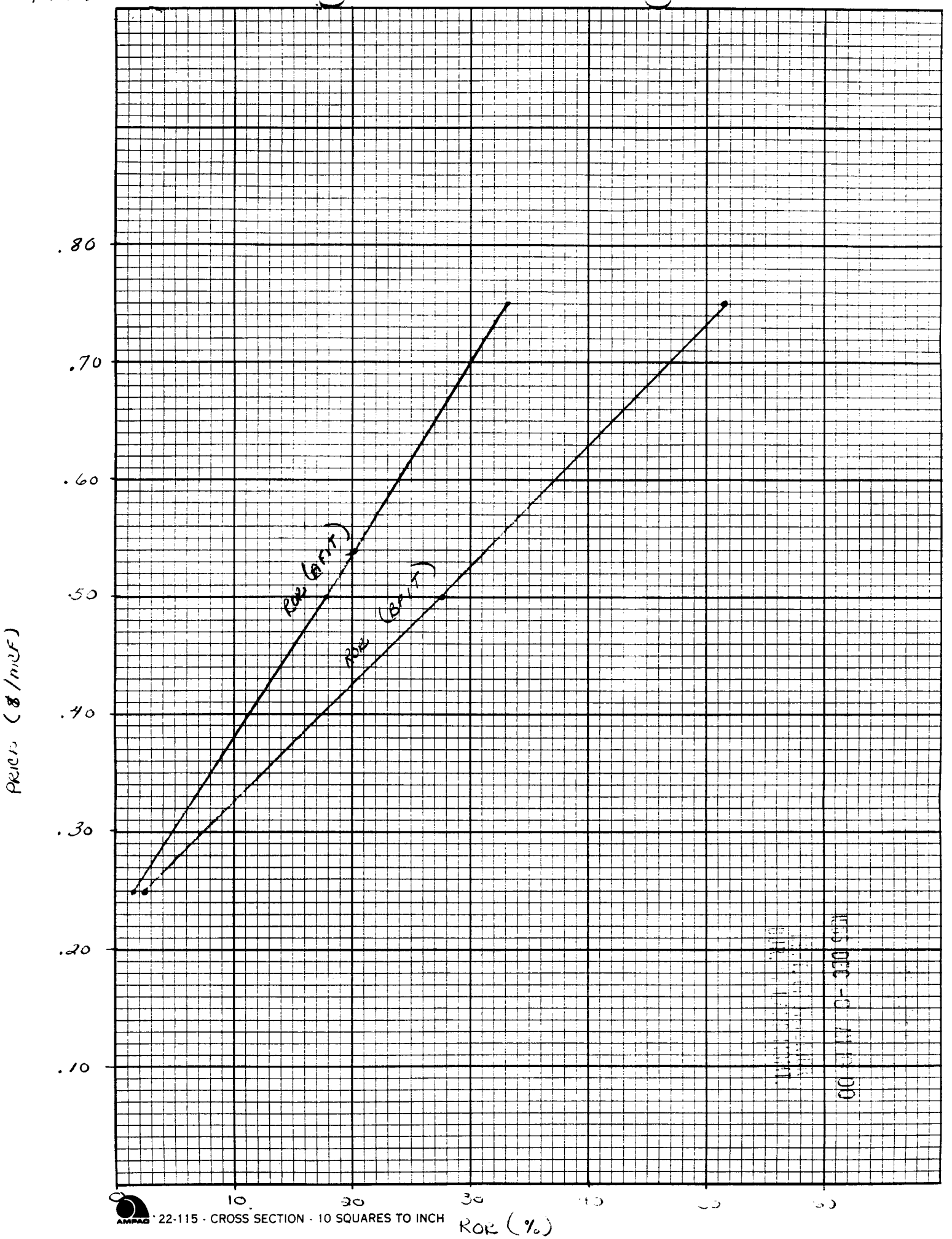
Sincerely,

HAMILTON BROTHERS OIL COMPANY

W. M. Gray
Engineering Manager

WMG:dp/ltr2
Attachments
cc: C. C. Stewart, Jr.

FISH LAKE PRIC



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 9, 1986

TO: Fish Lake 1-1 4305530030 SEC 01 T27S R03E Hamilton Brothers

FROM: Vicky Carney - Data Entry VC

RE: OPERATOR OF WELL

The operator of this well is HAMILTON BROTHERS N7330 even though it is owned by Mobil. The well was tested but completed temporarily abandoned.

No follow-up has been done on this well. When the TA'd wells begin to appear on the Turnaround Documents this will be handled the same as the other TA's.

0217S-56

Form OGC-3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

56 64 01

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ Other Shut-in - CO_2 well

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Hamilton Brothers Oil Company

3. ADDRESS OF OPERATOR: 1600 Broadway, P.O. Box 5870, Denver, Colorado 80217

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 2214' FWL & 1563' FSL of Sec. 1, T27S, R3E
At top prod. interval reported below: As above.
At total depth: As above.

5. LEASE DESIGNATION AND SERIAL NO.: U-18226

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NIL

7. UNIT AGREEMENT NAME: Loa Unit

8. FARM OR LEASE NAME: Fish Lake

9. WELL NO.: 1-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 1, T27S, R3E, S.L.B.& M.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

14. PERMIT NO.: 43-055-30030 DATE ISSUED: 5/21/81

15. DATE SPUDDED: 6/18/81

16. DATE T.D. REACHED: 11/11/81

17. DATE COMPL. (*Ready to prod.*): 12/21/81 temp. aban.

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: GL 8193'; KB 8209'

19. ELEV. CASINGHEAD: 8196'

20. TOTAL DEPTH, MD & TVD: 11,400' MD

21. PLUG, BACK T.D., MD & TVD: 9650' MD

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: ROTARY TOOLS: Total Depth CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: Tested only, results attached.

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Induction, Density, Dipmeter, Velocity

27. WAS WELL CORED: Yes

RECEIVED
OCT 04 1982
DIVISION OF OIL, GAS & MINING

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	133 ft/lb	845' KB	26"	800 sxs to surface	NIL
13-3/8"	68 lb/ft	1801' KB	17½"	1350 sxs to surface	NIL
9-5/8"	53.5 & 47#/ft	5475' KB	12¼"	1315 sxs	NIL
5½"	17 lb/ft	9731' KB	8½"	1800 sxs	NIL

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
NIL				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
NIL		

31. PERFORATION RECORD (*Interval, size and number*): Casing gun 4 JSPF, intervals on attached sheet.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
SEE ATTACHED SHEET.	

33.* PRODUCTION

DATE FIRST PRODUCTION: NIL

PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*):

WELL STATUS (*Producing or shut-in*):

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ed Jungbauer TITLE Drilling Superintendent DATE 9/30/82

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
1. Porous zones tested on attached sheet.			
2. Core #1, 6296'-6310', recovered 10".			
Core #2, 6310'-6326', recovered 14'.			
Core #3, 6326'-6342', recovered 16'.			
3. DST #1, 6290'-6338', miss run.			
DST #2, 6312'-6338', tool plugged, miss run.			
DST #3, 5370'-6392', tool plugged, miss run.			
DST #4, 5370'-6392', tool plugged, miss run.			
DST #5, 5370'-6392', tool plugged, miss run. FSIP 1027 psi.			

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Shinarump	4600' KB	
Meonkopi	4980' KB	
Coconino	6628' KB	
Hermosa	7310' KB	
Molas	7816' KB	
Redwall	7846' KB	
Ouray	9007' KB	
Elbert	9064' KB	
Lynch	9518' KB	
Ophir	10,956 KB	

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT OFFICE
150 EAST 900 NORTH
RICHFIELD, UTAH 84701

RECEIVED
MAR 13 1986
DIVISION OF
OIL, GAS & MINING

IN REPLY
REFER TO:
3100
(U-052)

March 11, 1986

Division Oil, Gas and Mining
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

082337

Attn: Vicky Carney

Dear Ms. Carney:

Enclosed is a copy of the serial register page you requested in your conversation with John Branch of this office. This page shows that oil and gas lease U-18226A is currently owned by Mobil Oil Corporation. This assignment was approved on May 1, 1981. If you need any further information or have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Donald L. Pendleton
District Manager

Enclosure: As Stated Above

FISH LAKE 1-1
4305530030
27S 3E 1
WAYNE CO.
COMPLETED 12-21-81 TA
WELL RE-ENTERED

Temporary Form 3160-13
(June 1994)

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 4

To Leisha Cordova	From Patty Ramstetter
Co.	Co. BLM
Dept.	Phone # 539-4048
Fax #	Fax #

MARATHON OIL CO.

Lease No./Unit/CA
U-18226

API No. Fish Lake 1-1 Sec. 1 27S, 3E
43-055-30030 NE/SW Sec 1, 12 7S, R 3E

Field Area
Loa

Status
T.A. to PA

Operator/Representative
Marathon Oil Charles Adams

Rig/Contractor/Representative

Type of Well*
CO2 Gas Well T.A.

*Dry Hole, Depleted Producer, Service, Water Well, etc.

INSP. NO.	INSPECTOR	ACT. CODE	OPEN DATE	CLOSE DATE	WELL INSPECTED NO.	OFFICE TIME	TRAVEL TIME	INSPECT. TIME	TRIPS
1	Mitchell		08/28/96	08-28-96	Fish lake 1-1	3 hrs	6 hrs	10 hrs	1
2	Mitchell		08-29-96	08-29-96	Fish lake 1-1	—	4 hrs	8 hrs	1

PLUGGING OPERATIONS	WITNESSED YES	NO	N/A
1. Plugs spotted across perforations if casing set?			✓
2. Plugs spotted at casing stubs?	✓		
3. Open hole plugs spotted as specified?	✓		
4. Retainers, bridge plugs, or packers set as specified?			✓
5. Cement quantities as specified?	✓		
6. Method of verifying and testing plugs as specified?	✓		
7. Pipe withdrawal rate satisfactory after spotting plugs?	✓		
8. All annular spaces plugged to surface?	✓		
9. INC issued?		✓	

RECEIVED
SEP 16 [illegible]
DIV OF OIL, GAS & MINING

Plug Tested: ☑ No ☐ Pressured ☐ Tagged

If tested, which plug(s):

Bottom Plug: Type Plug Balanced Depth(s) 5575' to 5375' Amount of Cement 4.7 bbls (23 sks)

Stub Plug: Type Plug Depth(s) Amount of Cement

Intermediate Plug: Type Plug Depth(s) Amount of Cement

Surface Shoe Plug: Amount of Cement 8.4 bbls. (41 sks) Top of Plug 1700'

Other: Type of Plug Surface Depth(s) 60' to Surface Amount of Cement 15.3 bbls. (75 sks)

All open Annulus Plugged from 60' to Surface.

Cement and mechanical plug placement data *(attach service company report, if available)*:

Remarks:
Note - At the second Plug from 1900' to 1700' the 5½" Casing was Perforated with 4 shots at 1850'. The Cement was placed, the well was closed in & pressured up, the Perfs took Approx 4½ bbls of Cmt before pressuring up. Should be a good plug between the 9⅝ & 5½" at the Casing Shoe

/221 • PHONE: (713) 747-4000

TICKET NO.
CT
Nº 48018
FP

COILED TUBING
A CAMCO INTERNATIONAL COMPANY

DAILY JOB REPORT

CUSTOMER Marathon Oil Co
UNIT NUMBER T4915 - 147
LEASE / FIELD
OPERATOR Wallock + Colson
WELL & NUMBER
DATE 8-28
COUNTY Uint
STATE Utah
TYPE JOB Set Cement plugs

TIME FROM	TIME TO	JOB DESCRIPTION
0700	10:15	Rig up CTU + Fill Tubing unit + pressure test to 4000# Fill Tubing with mud + safety meeting
10:15	11:30	Run Tubing in to 6240 Tagged plug.
	12:30	Pump mud up to 6575 Then cement up to 5375'
12:30		pump mud while pulling up to 2000' Filling
	1:15	casing to 2000' 19 bbl
1:15	1:45	pull out of the hole
1:45	2:15	Wate for CWP to perforate.
2:15	2:30	Rig up
2:30	3:00	Run in to 2000'
3:00		mix cement, pump mud out up to 1900'
	4:00	1900' set cement up to 1700'
4:00	5:30	Pull out of the hole blow out tubing + Rig down

Coil Tubing unit 887490
266400
1151890

MANNED WORKING HOURS	MANNED STANDBY HOURS	OFF-DUTY WELLSITE HOURS	FIELD ESTIMATED DAILY COST $

CUSTOMER COMMENT

CUSTOMER SIGNATURE OPERATOR SIGNATURE

Rev. 12/91 ORIGINAL - DISTRICT MANAGER YELLOW - CUSTOMER PINK - DISTRICT FILE GOLD - CUSTOMER

THE WESTERN COMPANY
CEMENT JOB DETAIL SHEET

CUSTOMER	DATE	F.R.#	SER. SUP.	TYPE JOB
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LEASE & WELL NAME OR SG	LOCATION	COUNTY-PARISH-BLOCK
[illegible] Fed. 1-1	Sec 1 T21S-R3E	[illegible]

DISTRICT	DRILLING CONTRACTOR RIG #	OPERATOR
[illegible]	[illegible] Coil Tubing	[illegible]

MATERIAL FURNISHED BY WPS	TYPE OF PLUGS (TOP / BTM)	LIST-CSG-HARDWARE	SQ MANI FOLD Y N	TOP OF EACH FLUID	PHYSICAL SLURRY PROPERTIES: SLURRY WGT. PPG	SLURRY YLD FT³	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
1st Plug 5575-5375 w/ 23 SKS "G" + .75% CD-32				5375	15.7	1.15	4.96	3:07	4.7	2.7
2nd Plug 1900-1700 w/ 41 SKS "G" + .75% CD-32 (8-29-96)				1700	15.7	1.15	4.96	3:07	8.4	4.8
3rd Plug 60-surf w/ 75 SKS "G" + .75% CD-32				Surf	15.7	1.15	4.96	3:07	15.3	8.8
								TOTAL	28.4	16.3

Available Mix Water 80 Bbl. Available Displ. Fluid 80 Bbl.

HOLE SIZE	% EXCESS	DEPTH	TBG-CSG-D.P. SIZE	WGT.	TYPE	DEPTH	TBG-CSG-D.P. SIZE	WGT.	TYPE	DEPTH	COLLAR DEPTHS SHOE	FLOAT	STAGE
			5½	17#	CSG	6288	1½		Coil Tubing	6218			

LAST CASING SIZE	WGT.	TYPE	DEPTH	PKR-CMT RET-BR PL-LINER BRAND & TYPE	DEPTH	PERF. DEPTH TOP	BTM	TOP CONN SIZE	THREAD	WELL FLUID TYPE	WGT.
								2"	WECO	Water	8.4

CAL. DISPL. VOL.-Bbl. TBG.	CSG.	CSG.	TOTAL	CAL. PSI BUMP PLUG	CAL. MAX PSI TO REV	OP. MAX SQ. PSI	MAX TBG PSI RATED	OP.	MAX CSG PSI RATED	OP.	DISPL. FLUID TYPE	WGT.	WATER SOURCE
							5000	4000			Gel Water	9.0	Tank

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING

PRESSURE RATE DETAIL: TIME HR: MIN.	PRESSURE-PSI PIPE	ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	EXPLANATION
						SAFETY MEETING: WPS CREW ☑ CO. REP ☑
						TEST LINES 4000 PSI
						CIRCULATING WELL-RIG ☐ WPS ☑
09:00						Safety meeting
[illegible]						Start Gel Fluid
10:10	3200		1.0	19.3	Gel H2O	Hole circulating - shut down
10:12					Gel H2O	Test lines 4000
11:34	1400		.1	2.0	Gel H2O	Pump on Coil Tubing
11:42	1400		.1	3.0	Gel H2O	Shut down - Batch up Cement 1st Plug
11:53			-	-	-	Start Cement down Coil Tubing
11:57	2700		1.1	4.7	CMT	Mud (Gel H2O) Displacement
12:17	2700		1.1	19.8	Gel H2O	Cement gel spot - cont. pumping behind
—	—					Coil Tubing chase plug.
13:00	2700		1.0	78.0	Gel H2O	Comp mud disp.
2nd Plug	1900 -	1700'				Perf @ 1850 - Coil Tubing @ 1500'
15:14						Start mix cement slurry
15:19	2400		1.1	8.4	CMT	All cement - start mud displacement.
15:42	2400		1.1	15.3	Gel H2O	Pull coil tubing to 1700' - cont. disp.
15:58					" "	Chase in well - pressure on plug.
16:01	300				" "	Release psi - cont. pumping
16:14	2400		1.1	39.0	Gel H2O	Complete job - shut down
17:30						Leave location for day

BUMPED PLUG Y N	PSI TO BUMP PLUG	TEST FLOAT EQUIP. Y N	TOTAL Bbl. PUMPED	Bbl. CMT RETURNS/ REVERSED	PSI LEFT ON CSG	SPOT TOP CEMENT	SER. SUP. R Carver
							CUSTOMER REP. Charles Adams

WCNA-1552 (6/90)

The Western Company— Treatment Report-Supplement

FIELD RECEIPT NO. 401328

Time AM/PM	Treating Pressure-Psi		Surface Slurry BBLS. Pumped		Slurry Rate BPM	Surface CO_2 BBLS. Pumped		CO_2 Rate BPM	Surface N^2 MSCF Pumped		N^2 Rate SCFM	Comments
	STP	Annulus	Stage	Total		Stage	Total		Stage	Total		
07:30												ON LOCATION 8-29-96
												— 3rd Plug 60'-surf in 5½ csg
12:29												START Mix Cement @ 15.7 ppg
13:34	10			15.3	.24							Comp Mixing - Plug Set.
												Weld on Dry Hole Marker

WCNA-1211 10/90

WRF-999

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: U-18226

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: FISHLAKE 1-1

2. Name of Operator: MARATHON OIL COMPANY

9. API Well No.: 43-055-30030

3. Address and Telephone No.: 1501 Stampede Ave Cody, WY 82414-4721 (307)587-4961

10. Field and Pool, or Exploratory Area: LOA FIELD

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): NE SW SECT. 1 TWNSHP 27.00 S RANGE 3.00 E
2214' FWL, 1563' FSL

11. County or Parish, State: WAYNE UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[X] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. 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.)*

Marathon Oil Company plugged and abandoned Fishlake #1-1 and reseeded the location. A history of the P&A work is as follows:

27-AUG-96
Removed large rocks from around wellhead after receiving surface use approval from Rob Hamilton of the Fish Lake National Forest Service, Loa Ranger District. Removed fence from around wellhead. No pressure on well. Removed christmas tree for ship to Wamsutter. Installed BOPE. Moved in and spot flat tank and CAMO coiled tubing unit. SWI. SDFN.
28-AUG-96
Moved in BJ cemeters. Held safety meeting. Mixed 9.0 lb. mud. Pressure tested surface lines okay to 4000 psi. Pressure tested BOP okay. RIH w/ 1.5" coiled tubing and tagged bottom at 6240'. Pumped 23.3 bbls. of 9.0# mud from

DST: ~~BLM ORIG+3~~, TITL&CONTS{HOUS}, ~~Findly Rev Actg - RMS~~
WRF, EMG, DMJ, GJP, VLS, WAMSUTTER UTAH O&GCC

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

Signed: [signature] Title: REGULATORY COORDINATOR Date: 13-SEP-96

(This space for Federal or State office use)

Approved by: [signature] Title: District Manager Date: September 17, 1998
Conditions of approval, if any:

RECEIVED
NOV 13 1998
DIV. OF OIL, GAS & MINING

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

6240'-5575', 23 sxs. of Class "G" cement containing .75% CD-32 from 5575'-5375', and 92.3 bbls. of 9.0# mud from 5375'-1900'. POH w/ coiled tubing. Rigged up Oil Well Perforators and perf'd 4 squeeze holes at 1850', across 13 3/8" intermediate casing string. RIH w/ 1.5" coiled tbg. to 1900' and pumped 41 sxs. of Class "G" cement containing .75% CD-32 from 1900'-1700', pulling tbg. to 1700'. Pressured on cmt. w/ 300 psi okay for 5 minutes. Pumped 58.3 bbls. of 9.0# mud from 1700'-60'. POH w/ tbg. Rigged down CAMCO coiled tubing unit. Released CAMCO. BLM witness, Theron Mitchell was present for the well work. SWI. SDFN.

29-AUG-96

Nippled down BOPE. Held safety meeting. Cut casing. Pushed 1" down 5 1/2" to 60'. Rigged up BJ. Pumped 75 sxs. of Class "G" cement containing .75% CD-32 down 1" and filled all annulus w/ cement. POH w/ 1". Waited 30 minutes and topped off casing. Released BJ. Welded on PA marker. Backfilled around wellhead to original level. Backhoe prepared location for seeding. Moved large rocks back around wellhead. BLM witness, Theron Mitchell was present for well work operation and Forest Service witness, Rob Hamilton was present for surface work operation.

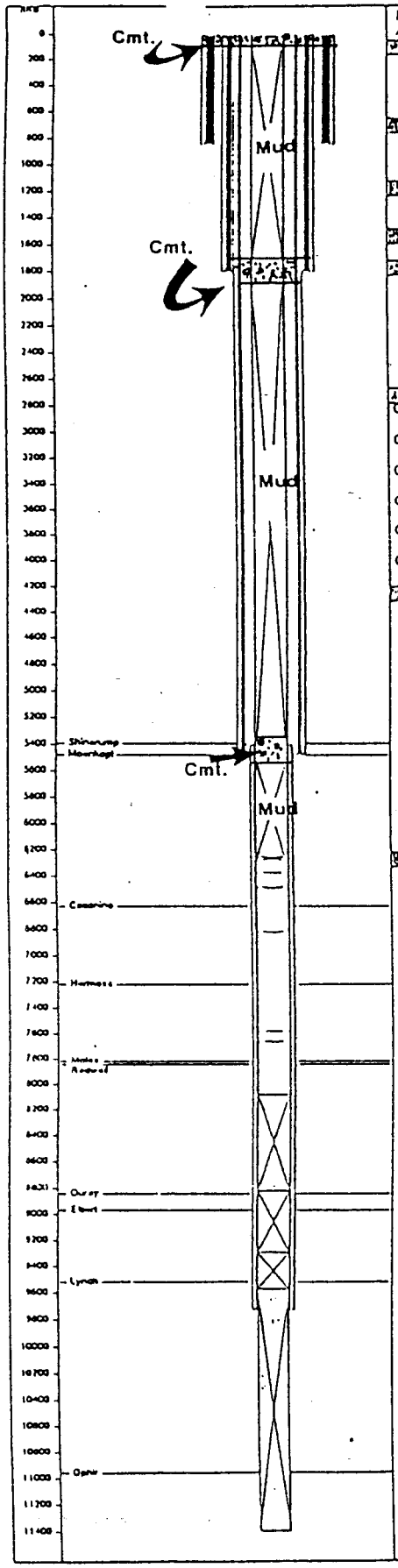
30-AUG-96

Finished backfilling around wellhead. Leveled location and prepared for seeding. Forest Service witness, Rob Hamilton brought correct grass seed and Flint Engineering and Construction crew spread around location. Surface location work looked good to the Forest Service witness. Shipped christams tree to Wamsutter. Released Flint crew. Well PA'd.

Fishlake 1-1

Marathon Oil Company

Plug and Abandon



Fish Lake 1-1 County: Wayne State: Utah
API # 43-055-30030

General Well Information
Licensee: Federal Ls.# 4-18226
Class.: Co2 Producer
Field: Loa
Spud: 6/18/81

Well Location
LSD: 2214 FWL, 1563' FSL
SEC: 1
TWP: 27S

Elevations
KB:8209.0 ft CF:
TH: Grd:8193.0 ft

Well Status
12/22/81 - CO2 Gas Well, TA'd

Perforations
7596.0-7610.0 Shots:4.0 /ft Date:12/12/81
7626.0-7640.0 Shots:4.0 /ft Date:12/12/81
6850.0-6854.0 Shots:4.0 /ft Date:12/14/81
6866.0-6908.0 Shots:4.0 /ft Date:12/14/81
6530.0-6534.0 Shots:4.0 /ft Date:12/17/81
6268.0-6338.0 Shots:4.0 /ft Date:12/18/81
6390.0-6450.0 Shots:4.0 /ft Date:12/18/81

Stimulations & Treatments
Cement squeeze w/ 50 sxs.: 12/5/81
9473.0-9480.0
Cement squeeze w/ above: 12/5/81
9483.0-9503.0
Cement squeeze w/ above: 12/5/81
9510.0-9516.0
Cement squeeze w/ 40 sxs.: 12/8/81
9020.0-9064.0
Cement squeeze w/ above: 12/8/81
9068.0-9080.0
Cement squeeze w/ 100 sxs.: 12/11/81
8554.0-8596.0

Casing String(s) & Equipment
Surface Casing w/ 800 sxs.
0.0-845.0 Run:7/14/81
OD:20.000 ID: Wt:133.00
Grd:BT-C Thrd: Jnts:21
Intermediate Casing 1 w/ 1350 sxs.
0.0-1801.0 Run:8/3/81
OD:13.375 ID: Wt:
Grd: Thrd: Jnts:0
Intermediate Casing 2 w/ 1315 sxs.
0.0-5475.0 Run:8/21/81
OD:9.625 ID: Wt:
Grd: Thrd: Jnts:0
Production Casing w/ 1800 sxs.
0.0-9731.0 Run:11/19/81
OD:5.500 ID:4.892 Wt:17.00
Grd:L-80 Thrd: Jnts:236

Other Equipment & Junk In Hole
Plug Backs/Abandoments
Plug Back w/ 100 sxs.
8081.0-8820.0 Run:12/11/81
OD:4.892 ID: Wt:
Grd:--Thrd: Jnts:0
Plug Back w/ 58 sxs.
8820.0-9293.0 Run:12/10/81
OD:4.892 ID: Wt:
Grd: Thrd: Jnts:0
Plug Back w/ 50 sxs.
9293.0-9572.0 Run:12/7/81
OD:4.892 ID: Wt:
Grd: Thrd: Jnts:0
PBTD - TD
9572.0-11400.0 Run:11/19/81
OD:4.892 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plugs In Hole
Bridge Plug w/ TOC @ 6250' (6 sxs.)
6250.0-6278.0 Run:12/21/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plug w/ TOC @ 6370' (8 sxs.)
6370.0-6380.0 Run:12/19/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plug w/ TOC @ 6480' (6 sxs.)
6480.0-6500.0 Run:12/17/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plug w/ TOC @ 6814' (4 sxs.)
6814.0-6830.0 Run:12/15/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plug w/ TOC @ 7578' (2 sxs.)
7578.0-7586.0 Run:12/14/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0
Bridge Plug w/ TOC @ 7660' (2 sxs.)
7660.0-7670.0 Run:12/12/81
OD:4.516 ID: Wt:
Grd: Thrd: Jnts:0

Prepared by C.R. Adams

8/29/96

43-055-30030

HAMILTON BROTHERS FISH LAKE FEDERAL 1-1 SUMMARY

DEPTH	DIP	DIP AZM	DEV	DEV AZM	DIAM 1-3	DIAM 2-4	QUAL
TOP 5474.0	3.2	139.	0.5	187.	9.1	8.8	A
BOTTOM 6390.0	18.8	277.	1.9	1.	6.8	7.0	*
TOP 6204.0	8.1	31.	2.1	36.	8.8	8.7	A
BOTTOM 6390.0	27.5	87.	1.9	7.	8.4	8.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6364	11.0	264	1.9	7	8.3	8.4	B
6366			2.0	10	8.3	8.4	
6368	21.4	160	2.0	12	8.3	8.4	D
6370	15.9	160	2.1	14	8.2	8.3	B
6372			2.0	20	8.2	8.3	
6374			2.0	21	8.3	8.4	
6376			2.0	17	8.3	8.5	
6378			2.0	18	8.3	8.5	
6380	29.4	107	2.0	18	8.2	8.4	D
6382			2.0	18	8.3	8.4	
6384	27.6	110	2.0	17	8.3	8.4	B
6386	29.6	107	1.9	14	8.3	8.2	B
6388			1.9	11	8.4	8.2	
6390	27.5	87	1.9	7	8.4	8.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6284			1.8	5	8.7	8.8	
6286			1.8	4	8.6	8.7	
6288			1.9	3	8.5	8.6	
6290			1.9	4	8.5	8.5	
6292			1.9	6	8.8	8.8	
6294			1.9	11	10.7	10.7	
6296			2.0	12	10.5	10.9	
6298			2.1	6	8.7	9.3	
6300			2.1	3	8.6	8.8	
6302			2.2	6	8.5	8.5	
6304			2.2	17	8.8	8.6	
6306			2.3	15	8.9	8.6	
6308			2.3	5	8.8	8.7	
6310			2.2	10	9.7	9.7	
6312			2.0	12	11.3	12.1	
6314			2.0	4	10.2	11.0	
6316			2.0	2	8.3	8.4	
6318			2.1	4	8.2	8.3	
6320			2.1	5	8.2	8.3	
6322			2.1	3	8.2	8.3	
6324			2.1	1	8.2	8.2	
6326			2.1	2	8.2	8.3	
6328			2.2	3	8.2	8.3	
6330			2.2	1	8.2	8.3	
6332			2.3	360	8.2	8.3	
6334			2.3	360	8.2	8.3	
6336			2.3	358	8.2	8.3	
6338			2.3	358	8.1	8.3	
6340			2.3	359	8.1	8.3	
6342			2.2	359	8.1	8.4	
6344			2.2	359	8.2	8.4	
6346			2.1	358	8.3	8.4	
6348			2.0	354	8.3	8.4	
6350			1.9	353	8.3	8.4	
6352			1.9	354	8.4	8.4	
6354			1.9	353	8.4	8.4	
6356	16.0	173	1.8	352	8.3	8.4	D
6358			1.8	355	8.3	8.4	
6360			1.8	360	8.3	8.4	
6362	10.7	282	1.8	3	8.3	8.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST mA
6204	8.1	31	2.1	36	8.8	8.7	A
6206	7.8	45	2.1	36	8.7	8.8	A
6208	15.1	51	2.1	35	8.7	8.8	A
6210	11.0	51	2.1	34	8.7	8.8	A
6212	8.8	34	2.1	33	8.7	8.8	C
6214	9.4	33	2.1	33	8.7	8.7	C
6216	16.9	87	2.1	33	8.7	8.7	C
6218	2.1	213	2.1	35	8.6	8.7	A
6220	16.2	104	2.1	35	8.7	8.8	D
6222	15.0	97	2.1	34	8.7	8.8	D
6224	14.7	102	2.1	33	8.8	8.8	D
6226	13.7	100	2.1	33	8.8	8.8	D
6228	11.6	94	2.1	32	8.7	8.8	B
6230	13.8	92	2.1	30	8.6	8.7	B
6232	17.5	86	2.1	28	8.6	8.8	D
6234	17.9	86	2.1	25	8.7	8.8	D
6236	11.0	143	2.0	23	8.7	8.7	D
6238	23.1	86	2.0	22	8.7	8.7	D
6240	16.6	93	2.0	19	8.7	8.7	D
6242	17.9	83	2.0	17	8.7	8.7	D
6244	16.9	82	2.0	16	8.7	8.7	B
6246	15.7	73	2.1	13	8.7	8.7	D
6248	14.6	84	2.1	14	8.6	8.7	D
6250	12.6	80	2.1	16	8.7	8.7	D
6252	16.2	108	2.1	15	8.7	8.7	A
6254	17.2	117	2.2	15	8.7	8.8	A
6256	17.3	102	2.2	13	8.7	8.9	A
6258	11.3	117	2.2	12	8.7	8.9	A
6260	17.1	112	2.2	12	8.7	8.9	A
6262	15.9	103	2.2	11	8.7	8.9	A
6264	13.9	94	2.2	11	8.8	8.8	A
6266	20.6	107	2.2	11	8.8	8.8	A
6268	16.1	112	2.1	10	8.7	8.8	A
6270	18.8	103	2.0	11	8.7	8.7	A
6272	22.2	104	1.9	12	8.7	8.8	B
6274	22.4	95	1.9	12	8.8	8.9	B
6276	21.4	83	1.9	9	8.7	8.8	D
6278			1.9	7	8.7	8.7	
6280			1.9	7	8.7	8.7	
6282			1.8	7	8.7	8.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6354			1.9	2	8.3	8.4	
6356	26.6	112	1.9	360	8.3	8.4	D
6358	24.2	112	2.0	1	8.3	8.4	D
6360	10.1	268	2.1	3	8.3	8.5	D
6362	10.8	253	2.1	3	8.3	8.5	D
6364			2.2	5	8.3	8.4	
6366	31.3	118	2.2	7	8.3	8.4	D
6368	27.5	124	2.2	9	8.3	8.4	D
6370			2.2	12	8.2	8.4	
6372			2.2	15	8.3	8.4	
6374			2.2	14	8.3	8.4	
6376			2.1	14	8.3	8.4	
6378			2.1	16	8.3	8.4	
6380			2.0	16	8.3	8.3	
6382			2.0	15	8.3	8.3	
6384			2.0	12	8.2	8.4	
6386			2.0	7	8.3	8.5	
6388			1.9	2	8.0	8.3	
6390			1.9	1	6.8	7.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6274	25.2	110	2.0	10	8.7	8.8	D
6276	30.7	110	2.0	9	8.6	8.7	D
6278	38.0	308	1.9	9	8.6	8.7	D
6280	38.9	297	1.9	11	8.8	8.8	D
6282	29.6	77	1.9	10	8.8	8.8	D
6284	29.0	79	1.9	10	8.7	8.7	B
6286	30.5	76	2.0	11	8.6	8.6	D
6288	18.2	82	2.0	12	8.5	8.5	D
6290	32.1	266	2.1	12	8.5	8.6	D
6292			2.2	15	10.6	10.7	
6294			2.3	16	11.1	10.8	
6296			2.4	8	9.5	8.9	
6298			2.4	3	9.0	8.7	
6300			2.4	1	8.5	8.6	
6302			2.4	1	8.5	8.8	
6304			2.5	1	8.5	8.9	
6306			2.4	360	8.7	8.9	
6308			2.4	4	10.7	10.7	
6310			2.3	6	12.9	12.1	
6312			2.2	357	10.8	10.1	
6314			2.1	353	8.4	8.4	
6316			2.0	356	8.3	8.4	
6318			1.9	358	8.3	8.4	
6320			1.8	359	8.3	8.3	
6322			1.8	360	8.3	8.3	
6324			1.9	3	8.3	8.3	
6326			1.9	4	8.3	8.3	
6328			1.9	3	8.3	8.3	
6330			2.0	4	8.2	8.3	
6332	38.5	110	2.0	5	8.2	8.3	D
6334			2.0	6	8.2	8.3	
6336			2.0	6	8.2	8.3	
6338			2.0	5	8.2	8.3	
6340			2.0	2	8.2	8.4	
6342			1.9	2	8.2	8.4	
6344	19.7	67	1.9	3	8.3	8.4	B
6346	36.7	102	1.9	5	8.3	8.4	D
6348	33.7	105	1.8	5	8.3	8.5	D
6350	33.1	108	1.8	3	8.3	8.5	D
6352			1.8	3	8.3	8.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6194	17.0	99	2.2	33	8.7	8.8	B
6196	17.3	101	2.2	34	8.7	8.7	B
6198	25.1	107	2.2	34	8.8	8.7	D
6200	25.3	87	2.2	35	8.9	8.7	D
6202	17.2	95	2.2	34	8.8	8.7	D
6204	23.4	102	2.2	34	8.8	8.8	D
6206	8.4	88	2.2	34	8.7	8.8	D
6208	2.6	61	2.2	33	8.7	8.8	D
6210	1.8	66	2.1	33	8.7	8.8	D
6212	2.8	89	2.1	34	8.6	8.7	D
6214	1.3	35	2.1	35	8.7	8.7	B
6216	0.7	204	2.1	35	8.7	8.7	B
6218	2.4	200	2.1	35	8.7	8.8	D
6220			2.1	35	8.7	8.8	
6222	19.5	78	2.1	33	8.6	8.8	D
6224	13.4	93	2.1	31	8.7	8.8	C
6226	13.1	92	2.1	30	8.7	8.8	C
6228	13.3	93	2.1	28	8.6	8.7	A
6230	12.8	85	2.1	26	8.6	8.8	C
6232	11.5	75	2.0	22	8.7	8.8	C
6234	19.5	101	2.0	20	8.7	8.7	D
6236	17.4	89	2.0	19	8.7	8.7	D
6238	17.3	88	2.0	18	8.7	8.7	D
6240	17.1	82	2.0	17	8.7	8.7	D
6242	14.3	91	2.0	15	8.7	8.7	B
6244	16.3	77	2.0	14	8.7	8.7	D
6246	14.0	94	2.1	14	8.6	8.7	D
6248	11.4	95	2.1	14	8.7	8.7	D
6250	15.4	86	2.1	12	8.7	8.7	D
6252	15.3	77	2.1	10	8.7	8.8	D
6254	17.3	84	2.1	10	8.7	8.8	B
6256	16.4	84	2.1	10	8.7	8.8	D
6258	12.9	104	2.1	10	8.7	8.8	A
6260	13.9	91	2.1	10	8.7	8.8	C
6262	14.0	84	2.1	9	8.8	8.9	A
6264	18.0	87	2.1	8	8.8	8.9	A
6266	16.4	97	2.1	9	8.7	8.9	A
6268	16.5	99	2.0	10	8.6	8.8	A
6270	22.1	114	2.0	11	8.7	8.8	B
6272	24.0	112	2.0	11	8.8	8.9	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6114			3.3	32	8.7	9.1	
6116	41.8	106	3.2	32	8.8	9.1	B
6118	33.9	113	3.2	33	8.8	9.1	D
6120			3.3	33	8.7	9.0	
6122			3.2	33	8.7	8.9	
6124			3.2	33	8.6	8.9	
6126			3.2	32	8.5	8.8	
6128	23.8	109	3.1	29	8.5	8.8	D
6130			3.0	28	8.6	8.8	
6132	24.4	105	3.0	29	8.8	8.7	D
6134	24.1	102	3.1	29	8.8	8.8	D
6136			3.0	28	8.7	8.8	
6138			2.9	27	8.7	8.7	
6140	22.2	101	2.8	28	8.8	8.6	D
6142	21.9	89	2.7	28	8.8	8.6	D
6144	21.5	93	2.7	29	8.9	8.7	B
6146	22.7	85	2.7	30	9.0	8.8	D
6148			2.7	31	8.9	8.9	
6150			2.6	33	8.8	8.9	
6152	3.7	204	2.6	32	8.6	9.3	D
6154			2.6	33	8.6	9.4	
6156			2.6	32	8.7	9.1	
6158	7.9	101	2.8	31	9.0	9.6	D
6160	3.7	92	2.9	34	9.6	10.8	B
6162			2.8	35	10.2	11.1	
6164	11.6	74	2.8	32	9.8	9.9	D
6166			2.8	31	9.2	8.9	
6168	20.2	98	2.7	32	9.2	8.9	A
6170	19.3	94	2.7	31	9.1	8.9	A
6172	22.4	94	2.6	29	9.1	8.8	A
6174	19.2	95	2.6	32	9.1	8.8	A
6176	18.4	93	2.5	30	9.1	8.8	D
6178	17.0	93	2.5	25	9.2	8.9	D
6180	18.4	99	2.4	26	9.1	8.9	B
6182	17.8	89	2.3	27	9.0	8.8	A
6184	15.1	79	2.3	29	8.9	8.7	A
6186	15.7	85	2.3	31	8.8	8.7	A
6188	21.3	79	2.3	32	8.8	8.7	A
6190	17.7	93	2.3	33	8.8	8.7	D
6192	18.4	83	2.2	33	8.7	8.7	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6034	17.4	110	3.7	32	9.3	10.3	B
6036	19.5	105	3.6	36	9.1	10.0	B
6038	13.8	103	3.7	37	9.3	10.4	B
6040	12.5	112	3.7	37	9.6	11.1	D
6042	14.9	118	3.7	36	9.4	11.4	D
6044	15.4	112	3.7	33	9.3	11.8	D
6046	11.9	106	3.6	29	10.9	14.0	D
6048	19.1	115	3.6	31	11.0	13.4	A
6050	23.4	114	3.7	34	9.3	10.6	A
6052	27.4	125	3.7	35	8.7	9.6	C
6054	21.7	119	3.6	35	8.7	9.3	C
6056	22.0	108	3.6	34	8.8	9.1	A
6058			3.6	34	8.8	9.2	
6060	31.6	115	3.6	34	8.8	9.1	C
6062	25.4	103	3.7	35	8.7	9.0	C
6064	26.0	119	3.6	35	8.8	9.1	A
6066	23.7	110	3.6	35	9.0	9.4	A
6068	18.4	94	3.7	35	9.0	9.7	D
6070	22.0	119	3.7	32	9.3	10.0	D
6072	22.3	109	3.6	32	9.2	9.7	D
6074	34.7	101	3.6	35	8.9	9.4	D
6076	31.0	110	3.5	35	8.9	9.4	D
6078	18.0	109	3.5	34	9.2	9.6	B
6080	23.4	105	3.5	33	9.3	9.7	B
6082	27.0	106	3.4	33	9.1	9.5	B
6084			3.4	36	9.0	9.5	
6086			3.4	35	9.1	9.5	
6088			3.6	33	9.1	9.8	
6090			3.6	32	9.0	9.7	
6092			3.6	33	8.8	9.4	
6094			3.5	32	8.8	9.3	
6096			3.5	31	8.8	9.1	
6098	29.4	83	3.5	31	8.7	9.0	B
6100	33.0	83	3.5	32	8.7	9.0	B
6102	28.9	84	3.5	32	8.8	8.9	B
6104	28.5	85	3.4	31	8.9	9.0	B
6106	28.7	83	3.3	30	8.9	9.0	D
6108			3.3	31	8.8	8.9	
6110			3.3	31	8.8	9.0	
6112	33.2	101	3.3	31	8.8	9.1	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5954	5.3	160	3.8	32	8.9	9.4	A
5956	5.3	204	3.8	33	9.1	9.5	A
5958	4.8	227	3.8	34	9.0	9.5	A
5960	5.9	219	3.8	33	8.8	9.3	A
5962	4.3	171	3.8	34	8.9	9.3	A
5964	8.5	134	3.9	34	9.6	9.9	A
5966	4.4	137	4.0	33	12.0	12.0	A
5968			3.9	33	11.3	11.3	
5970			3.8	33	9.0	9.1	
5972	29.2	105	3.8	32	9.0	9.1	D
5974	29.7	103	3.8	32	9.0	9.1	D
5976			3.8	32	9.3	9.6	
5978	32.7	102	3.8	32	9.4	9.8	D
5980	34.2	101	3.8	33	9.2	9.3	D
5982	33.3	101	3.8	33	9.2	9.0	D
5984	34.3	103	3.7	34	9.1	9.0	D
5986			3.7	34	9.1	9.0	
5988	26.4	109	3.7	34	9.2	9.0	D
5990	26.2	115	3.7	34	9.3	9.0	D
5992	25.9	116	3.7	34	9.3	9.0	D
5994	23.5	108	3.7	36	9.4	9.0	D
5996	31.5	100	3.8	38	9.4	9.0	D
5998			3.8	38	9.4	9.0	
6000			3.8	38	9.4	9.0	
6002	3.6	205	3.8	39	9.4	9.0	B
6004	3.5	217	3.8	39	9.7	9.1	B
6006	3.6	218	3.7	38	10.0	9.1	D
6008	4.6	232	3.7	39	9.9	9.2	B
6010	8.8	284	3.7	41	9.6	9.2	D
6012			3.7	40	9.1	9.3	
6014			3.7	37	8.8	9.5	
6016	3.0	184	3.8	37	9.0	9.6	D
6018			3.9	38	9.1	9.7	
6020	7.7	234	3.9	38	9.1	9.8	D
6022			3.9	38	9.0	9.8	
6024			3.9	38	8.9	9.7	
6026			3.9	37	8.9	9.8	
6028	22.6	121	3.9	38	9.7	10.3	D
6030			3.9	37	10.2	11.0	
6032			3.8	33	9.7	10.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5874	8.0	131	3.9	27	9.0	9.3	A
5876	6.1	162	3.9	27	9.0	9.3	A
5878	7.0	135	4.0	28	9.0	9.3	A
5880	10.4	129	3.8	29	9.3	9.4	A
5882	3.2	99	3.6	27	9.3	9.5	C
5884	6.9	135	3.7	25	9.8	9.6	C
5886	18.9	97	3.8	25	9.6	9.6	C
5888	10.4	105	3.8	26	8.7	9.4	C
5890	9.0	101	3.8	27	8.8	9.4	C
5892	10.5	131	3.8	27	9.0	9.5	A
5894	10.6	129	3.7	28	9.0	9.6	A
5896	6.8	133	3.7	29	9.1	9.6	A
5898			3.7	27	9.1	9.6	
5900	14.1	109	3.7	27	9.4	9.8	C
5902	8.7	104	3.8	29	9.3	9.7	A
5904	8.5	112	3.8	29	9.0	9.5	A
5906	8.7	111	3.8	28	9.4	9.6	A
5908	8.6	99	3.8	28	9.3	9.6	C
5910	9.5	129	3.7	29	9.0	9.5	C
5912	9.6	79	3.7	31	9.1	9.5	A
5914	8.4	122	3.8	31	9.3	9.6	A
5916	13.3	76	3.9	28	9.9	10.1	C
5918	9.3	112	3.9	27	9.8	10.1	A
5920	12.2	99	3.9	28	9.1	9.6	A
5922	12.5	93	3.9	29	9.3	9.7	A
5924	11.1	96	3.9	29	9.5	9.6	A
5926	10.1	103	3.8	30	9.4	9.5	A
5928	7.6	126	3.8	31	9.2	9.5	A
5930	6.8	117	3.8	30	8.9	9.5	A
5932	8.8	155	3.8	30	8.8	9.5	C
5934	22.3	96	3.8	31	8.8	9.5	D
5936	22.2	96	3.8	31	8.8	9.4	D
5938	18.8	101	3.8	31	8.8	9.4	D
5940	20.0	101	3.8	31	8.8	9.4	D
5942	20.2	100	3.8	31	8.9	9.4	D
5944	17.6	97	3.8	30	8.9	9.4	D
5946	11.9	105	3.8	29	8.9	9.4	C
5948	5.1	124	3.8	31	9.0	9.4	A
5950	3.1	206	3.8	32	8.9	9.4	C
5952	7.2	142	3.8	32	8.9	9.4	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5794	8.0	114	3.6	18	9.3	9.4	A
5796	8.2	105	3.6	16	9.3	9.4	A
5798	2.8	187	3.7	17	9.3	9.3	C
5800	15.8	71	3.6	20	9.5	9.4	C
5802	3.0	134	3.6	18	9.4	9.3	A
5804	5.6	114	3.6	18	8.9	9.1	A
5806	2.9	177	3.6	19	8.9	9.1	C
5808	3.8	258	3.6	21	9.4	9.3	C
5810	7.9	110	3.6	21	9.6	9.5	C
5812	3.6	99	3.7	21	9.6	9.7	C
5814	9.6	233	3.7	21	9.5	9.5	C
5816	6.2	105	3.7	21	9.4	9.4	A
5818	8.4	95	3.7	20	9.3	9.5	C
5820	12.9	72	3.7	19	9.3	9.4	D
5822	14.2	76	3.7	18	9.2	9.4	B
5824	13.2	62	3.7	18	9.2	9.5	B
5826	13.3	66	3.7	20	9.0	9.5	B
5828	16.1	110	3.6	22	9.1	9.4	A
5830	15.1	99	3.6	23	9.2	9.3	A
5832	13.0	116	3.6	24	9.3	9.3	C
5834	12.9	129	3.7	24	9.4	9.4	A
5836	10.3	109	3.6	24	9.5	9.4	C
5838	11.9	63	3.6	24	9.3	9.4	C
5840	16.2	101	3.7	23	9.3	9.5	A
5842	17.7	107	3.7	23	9.4	9.5	A
5844	18.8	99	3.7	22	9.5	9.5	A
5846	15.9	87	3.7	22	9.5	9.5	A
5848	16.6	84	3.7	23	9.2	9.4	A
5850	11.3	77	3.7	23	8.9	9.4	A
5852	13.4	84	3.7	23	9.1	9.5	A
5854	16.1	94	3.7	23	9.0	9.4	A
5856	16.7	95	3.7	24	8.8	9.3	A
5858	16.9	92	3.7	24	8.8	9.2	A
5860	16.8	92	3.7	25	8.8	9.2	A
5862	14.7	85	3.6	25	8.8	9.2	A
5864	15.3	97	3.6	25	8.8	9.2	A
5866	15.2	98	3.6	25	9.1	9.4	A
5868	9.7	107	3.7	25	9.2	9.5	C
5870	12.8	88	3.7	26	8.9	9.4	A
5872	15.6	104	3.8	27	8.9	9.3	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5714			3.0	24	9.8	9.4	
5716	8.7	239	3.1	21	9.9	9.2	D
5718	4.2	187	3.2	21	10.1	9.2	B
5720	2.2	195	3.2	22	10.0	9.5	B
5722	0.1	260	3.1	22	9.9	9.7	B
5724	1.5	54	3.1	24	10.0	9.7	B
5726	4.2	99	3.1	24	10.1	9.6	D
5728	4.9	45	3.1	23	9.8	9.4	B
5730			3.1	23	9.6	9.5	
5732	13.6	111	3.2	24	9.9	9.6	D
5734	12.8	139	3.2	23	9.9	9.4	B
5736	5.9	15	3.3	22	9.7	9.5	D
5738	1.6	117	3.4	22	9.9	9.9	B
5740	1.6	180	3.4	22	10.1	10.2	B
5742	4.6	355	3.4	21	10.2	10.0	D
5744	6.3	135	3.3	22	10.1	10.1	D
5746	8.5	96	3.2	22	9.9	10.2	D
5748	7.5	117	3.3	22	9.8	10.1	D
5750	5.5	87	3.4	22	9.9	10.5	B
5752	4.9	128	3.5	22	10.0	10.8	D
5754	8.3	114	3.5	22	9.6	10.3	B
5756	8.3	103	3.4	22	9.3	9.8	C
5758	9.1	98	3.4	23	9.2	9.8	A
5760	9.7	108	3.4	23	9.2	9.6	A
5762	9.4	108	3.3	22	9.2	9.5	A
5764	14.2	108	3.3	19	9.3	9.5	D
5766	12.6	115	3.4	19	9.3	9.7	D
5768	15.4	99	3.4	22	9.1	9.8	D
5770	13.8	107	3.5	23	9.1	9.7	B
5772	11.4	99	3.5	22	9.2	9.5	D
5774	11.0	106	3.6	22	9.2	9.5	A
5776	7.6	105	3.6	21	9.2	9.4	A
5778	9.5	107	3.6	21	9.3	9.5	A
5780	9.5	108	3.7	22	9.3	9.5	A
5782	10.8	95	3.7	20	9.3	9.5	A
5784	12.2	104	3.8	19	9.3	9.4	C
5786	14.6	105	3.7	19	9.2	9.4	A
5788	15.7	108	3.6	19	9.2	9.4	A
5790	8.8	95	3.6	19	9.3	9.4	A
5792	7.6	104	3.6	19	9.3	9.3	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5634	3.1	159	2.5	25	9.3	9.8	B
5636	4.1	138	2.5	24	9.3	9.7	D
5638	4.5	135	2.5	25	9.3	9.7	D
5640	4.5	141	2.6	24	9.3	9.8	D
5642	5.7	239	2.6	24	9.4	10.0	A
5644	3.7	281	2.5	23	9.4	10.1	A
5646	0.9	269	2.5	22	9.5	10.1	A
5648	5.0	237	2.5	24	9.5	10.0	A
5650	6.8	244	2.5	26	9.5	10.0	A
5652	7.8	248	2.5	25	9.5	10.2	A
5654	10.9	264	2.5	25	9.6	10.2	A
5656	4.5	244	2.6	24	9.9	10.3	C
5658	3.4	224	2.6	24	9.8	10.3	A
5660	9.7	244	2.6	25	9.7	10.2	C
5662	12.2	277	2.6	25	9.6	10.3	A
5664	4.8	221	2.7	22	9.3	10.3	A
5666	5.2	188	2.7	21	9.3	10.1	A
5668	5.2	176	2.8	23	9.6	10.1	A
5670	5.1	198	2.8	22	9.8	10.2	A
5672	6.6	227	2.8	20	10.0	10.5	C
5674	4.5	192	2.8	20	10.2	10.6	A
5676	5.1	197	2.7	19	10.1	10.4	A
5678	1.9	157	2.8	21	9.9	10.1	A
5680	2.1	142	2.9	22	9.8	9.9	A
5682	8.1	199	3.0	22	9.7	9.9	C
5684	4.4	156	3.0	20	9.6	9.9	C
5686	2.3	72	2.9	20	9.4	9.7	C
5688	1.1	167	3.0	20	9.4	9.7	A
5690			2.9	20	9.6	9.7	
5692	6.5	221	2.9	20	9.6	9.5	C
5694	7.5	238	2.9	20	9.4	9.4	C
5696	4.9	220	3.0	20	9.7	9.5	B
5698	4.7	160	3.0	20	9.8	9.5	B
5700	3.8	131	2.9	23	9.5	9.5	B
5702	3.4	146	2.8	24	9.5	9.5	B
5704	8.4	115	2.8	23	9.5	9.4	D
5706			2.7	24	9.6	9.4	
5708			2.8	23	9.6	9.5	
5710			2.9	22	9.5	9.5	
5712			2.9	25	9.7	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST #A
5554	9.6	178	1.9	36	9.9	9.5	C
5556	4.7	199	2.0	37	9.9	9.4	A
5558	4.3	208	2.0	36	10.0	9.5	A
5560	3.0	230	2.0	37	10.0	9.6	A
5562	3.0	221	2.0	36	10.0	9.7	A
5564	3.2	197	2.0	36	10.0	9.6	A
5566	3.5	220	2.0	37	10.0	9.4	A
5568	11.6	177	1.9	36	9.9	9.2	D
5570	11.7	178	1.9	35	9.8	9.4	D
5572	8.1	236	1.9	35	9.7	9.7	B
5574	9.5	172	2.0	34	9.7	9.6	D
5576	11.6	166	2.0	32	9.7	9.5	D
5578	13.3	158	2.0	32	9.7	9.5	D
5580	9.1	212	2.0	34	9.5	9.7	D
5582	15.1	156	2.0	34	9.6	9.7	D
5584	14.9	154	2.0	33	9.7	9.7	D
5586	10.4	162	2.1	32	9.7	9.6	B
5588			2.1	31	9.8	9.7	
5590			2.1	31	9.8	9.8	
5592			2.1	31	9.7	9.8	
5594	18.9	78	2.1	31	9.6	9.8	B
5596	18.4	70	2.2	30	9.5	9.7	B
5598	4.6	68	2.2	29	9.5	9.8	A
5600	4.1	128	2.3	28	9.4	9.9	A
5602	3.0	264	2.3	27	9.3	9.9	A
5604	2.1	46	2.3	27	9.3	9.8	A
5606	1.2	9	2.3	27	9.4	9.8	A
5608	2.7	151	2.3	27	9.5	9.8	A
5610	2.5	165	2.3	26	9.4	10.0	A
5612	5.8	290	2.3	25	9.3	10.3	C
5614	6.0	288	2.3	25	9.2	10.2	C
5616	0.6	225	2.4	25	9.2	10.1	A
5618	9.3	97	2.4	25	9.5	10.0	C
5620	1.6	360	2.4	25	9.6	10.1	C
5622	4.1	94	2.4	25	9.4	10.2	C
5624	3.5	182	2.5	27	9.4	9.9	A
5626	3.7	190	2.5	27	9.5	9.9	A
5628	3.2	180	2.5	27	9.4	9.9	A
5630	2.2	196	2.5	28	9.3	9.9	A
5632	3.0	134	2.5	27	9.3	9.9	D

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HIGH RESOLUTION

DIPMETER

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CLUSTER LISTING
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HAMILTON BROTHERS

WILDCAT

WAYNE , UTAH

FISH LAKE FEDERAL 1-1

RUN NO. THREE JOB NO. 004632

CLUSTER RESULTS ONLY

4 FT. CORR. - 2 FT. STEP

30 DEG. X2 SEARCH ANGLE

LISTRES	2.00	0.00	0.00	0.00	0.00	0.00	0.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.0

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5474	3.2	139	0.5	187	9.1	8.8	A
5476	3.2	146	0.6	182	9.4	8.6	A
5478	0.7	178	0.6	196	9.8	8.4	C
5480	4.6	142	0.6	182	10.1	8.5	A
5482	2.3	314	0.6	172	10.2	8.7	A
5484	5.4	301	0.7	212	10.4	9.0	A
5486	6.3	248	0.7	189	10.5	9.0	A
5488	2.5	220	0.8	65	10.6	9.0	A
5490	2.8	260	0.8	55	10.8	9.1	C
5492	4.1	151	0.8	52	11.0	9.1	C
5494	8.5	160	0.8	54	11.3	9.0	A
5496	10.9	154	0.9	54	11.6	9.0	A
5498	3.2	185	0.9	52	11.7	9.0	C
5500	3.9	218	0.9	51	11.7	9.0	A
5502	3.2	197	0.9	52	11.7	9.2	A
5504	4.4	141	0.9	50	11.7	9.4	A
5506	2.1	116	1.0	47	11.7	9.4	A
5508	3.9	187	1.0	47	11.6	9.2	A
5510	3.2	174	1.1	46	11.4	9.3	A
5512	2.9	207	1.1	45	11.0	9.5	A
5514	3.1	221	1.1	43	10.6	10.0	A
5516	1.4	247	1.2	42	10.5	11.2	A
5518	6.6	173	1.3	44	10.6	12.0	A
5520	8.9	203	1.4	43	10.7	11.5	A
5522	7.7	179	1.4	40	10.6	10.9	A
5524	5.8	230	1.6	38	10.5	11.1	A
5526	5.4	175	1.6	38	10.3	10.8	A
5528	6.7	162	1.6	39	10.0	9.8	A
5530	8.0	120	1.6	39	10.1	9.1	C
5532	9.1	154	1.6	38	10.4	9.0	C
5534	10.4	159	1.6	37	10.6	9.2	C
5536			1.6	36	10.6	9.2	
5538	9.0	178	1.6	37	10.5	9.1	C
5540	7.3	172	1.6	39	10.2	9.2	C
5542	5.1	193	1.6	40	10.0	9.3	A
5544	3.7	184	1.7	40	9.8	9.4	A
5546	11.7	187	1.7	39	9.7	9.5	C
5548	11.0	185	1.8	37	9.7	9.6	C
5550	7.4	166	1.8	36	9.7	9.6	A
5552	9.7	181	1.9	35	9.8	9.6	C

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HIGH RESOLUTION

DIPMETER

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CLUSTER LISTING
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HAMILTON BROTHERS

WILDCAT

WAYNE, UTAH

FISHLAKE FEDERAL 1-1

RUN NO. FOUR JOB NO. 4743

CLUSTER RESULTS ONLY

4.00 FT. CORR. - 2 FT. STEP

30 DEG. X2 SEARCH ANGLE

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5482.0			1.2	136	9.7	12.2	
5484.0	10.0	159	1.2	23	10.2	12.5	A
5486.0	12.8	173	1.2	30	10.7	12.9	C
5488.0			1.1	38	11.0	13.3	
5490.0			1.1	41	10.3	13.7	
5492.0	10.9	150	1.1	43	9.6	14.1	A
5494.0	8.0	166	1.1	45	9.4	14.4	A
5496.0	10.2	166	1.1	45	9.5	14.7	A
5498.0			1.2	44	10.4	15.0	
5500.0	11.9	159	1.2	45	10.6	15.0	B
5502.0	6.3	151	1.2	43	10.3	15.0	B
5504.0	6.0	162	1.2	40	10.3	15.1	B
5506.0	9.1	197	1.3	41	9.8	15.4	B
5508.0	7.9	138	1.3	42	9.1	15.6	D
5510.0			1.3	43	8.4	15.5	
5512.0	11.8	184	1.3	42	8.7	15.4	D
5514.0			1.3	38	9.3	15.7	
5516.0			1.4	34	9.3	15.9	
5518.0	9.1	181	1.5	36	8.8	15.9	D
5520.0	8.2	127	1.5	37	8.2	15.8	D
5522.0	11.7	161	1.5	36	7.8	15.8	B
5524.0	12.1	160	1.4	37	7.5	15.7	B
5526.0	11.7	161	1.4	37	7.3	15.4	B
5528.0			1.3	41	7.2	15.4	
5530.0			1.2	46	7.3	15.7	
5532.0			1.1	49	7.4	15.8	
5534.0			0.9	59	7.4	15.8	
5536.0			0.9	62	7.3	15.7	
5538.0			0.9	65	7.1	15.1	
5540.0	14.4	155	0.9	69	7.3	14.7	A
5542.0	10.1	178	1.0	67	7.6	14.6	A
5544.0			1.1	66	7.7	14.7	
5546.0	11.6	168	1.0	67	7.7	14.7	A
5548.0	12.6	166	1.0	68	7.9	14.8	A
5550.0	10.7	195	1.0	68	8.2	15.0	A
5552.0	12.8	180	1.0	66	8.3	15.0	A
5554.0	13.2	180	1.0	63	8.6	15.1	A
5556.0	10.1	190	1.0	61	8.7	15.3	A
5558.0	17.9	174	1.1	61	8.3	15.3	D
5560.0	9.3	172	1.1	58	8.1	15.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5562.0	13.5	156	1.2	54	8.3	15.8	D
5564.0	11.1	154	1.3	51	8.0	16.1	D
5566.0	11.0	160	1.4	52	7.2	16.1	D
5568.0	10.9	155	1.4	55	7.0	16.1	D
5570.0	16.6	161	1.2	56	7.9	16.0	D
5572.0	18.8	161	1.2	53	8.5	16.2	D
5574.0			1.2	51	7.8	16.4	
5576.0			1.2	52	7.4	16.2	
5578.0	13.7	146	1.2	54	7.3	15.7	C
5580.0	16.5	142	1.2	54	7.1	15.6	A
5582.0	17.5	142	1.2	54	7.1	15.6	A
5584.0	17.6	144	1.3	56	7.1	15.6	A
5586.0			1.3	57	7.3	15.7	
5588.0			1.4	57	7.7	15.5	
5590.0			1.4	57	8.1	15.8	
5592.0			1.4	55	8.0	16.7	
5594.0			1.4	53	7.5	16.9	
5596.0	6.4	228	1.4	53	7.6	16.9	D
5598.0	1.2	199	1.4	51	7.7	17.6	D
5600.0	6.6	182	1.5	49	7.5	17.6	D
5602.0	6.5	218	1.4	46	7.3	17.1	B
5604.0	7.5	231	1.3	49	7.6	16.8	B
5606.0	11.3	243	1.3	51	7.5	16.5	D
5608.0	5.6	217	1.2	50	8.1	16.6	B
5610.0			1.2	52	8.6	17.1	
5612.0	3.5	131	1.2	51	8.1	17.3	C
5614.0	6.1	248	1.2	50	7.8	17.2	C
5616.0	7.6	192	1.2	50	7.4	16.6	A
5618.0	4.8	235	1.3	53	7.7	17.0	C
5620.0	4.7	272	1.4	51	8.2	17.5	A
5622.0	5.2	164	1.5	49	7.9	17.0	A
5624.0	7.1	217	1.5	50	7.8	16.9	A
5626.0	4.4	197	1.5	50	7.8	17.1	A
5628.0	7.0	166	1.5	48	7.9	17.0	A
5630.0	5.8	247	1.5	44	7.7	17.0	A
5632.0	4.8	239	1.5	43	7.5	17.1	A
5634.0	3.6	171	1.4	46	7.7	16.9	C
5636.0	2.4	88	1.3	46	8.0	16.8	C
5638.0	2.1	216	1.3	44	7.6	17.0	A
5640.0	3.4	219	1.4	44	7.2	17.2	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5642.0	3.5	179	1.4	43	7.2	17.6	A
5644.0	3.5	148	1.4	42	7.3	17.8	C
5646.0	18.2	100	1.5	44	7.7	17.4	B
5648.0	4.3	107	1.5	47	8.4	17.8	C
5650.0	5.3	238	1.4	46	9.0	18.4	A
5652.0	4.9	91	1.4	45	8.8	18.5	D
5654.0	2.3	220	1.4	45	8.3	18.6	B
5656.0	3.2	233	1.4	43	8.3	18.5	B
5658.0	8.4	241	1.4	43	8.3	18.4	D
5660.0			1.4	43	8.4	18.8	
5662.0			1.4	43	8.2	19.0	
5664.0			1.4	42	8.0	19.0	
5666.0			1.3	41	8.1	19.0	
5668.0	3.2	229	1.3	42	8.5	19.0	D
5670.0			1.3	43	8.5	18.9	
5672.0			1.4	45	8.3	18.9	
5674.0			1.4	46	8.2	19.0	
5676.0			1.3	44	8.1	19.0	
5678.0			1.3	40	8.0	19.0	
5680.0			1.3	40	7.6	19.0	
5682.0			1.4	38	7.2	19.0	
5684.0			1.4	36	7.3	18.9	
5686.0			1.4	37	7.5	18.9	
5688.0			1.4	37	7.5	18.9	
5690.0			1.3	35	7.5	19.0	
5692.0			1.3	33	7.6	19.0	
5694.0			1.4	32	7.7	19.0	
5696.0			1.4	33	8.0	19.0	
5698.0			1.3	32	8.4	19.0	
5700.0			1.3	33	8.7	19.0	
5702.0			1.4	34	8.9	19.0	
5704.0			1.4	35	8.6	19.0	
5706.0			1.4	36	8.1	19.0	
5708.0			1.4	36	8.0	19.0	
5710.0			1.4	35	7.8	19.0	
5712.0			1.4	32	7.5	19.0	
5714.0			1.4	31	7.5	19.0	
5716.0			1.4	32	7.7	19.0	
5718.0			1.4	31	8.1	19.0	
5720.0			1.5	30	8.1	19.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST A
5722.0			1.5	32	7.8	19.0	
5724.0			1.4	34	8.1	19.0	
5726.0			1.4	35	8.5	19.0	
5728.0			1.4	33	8.4	19.0	
5730.0			1.4	28	7.9	19.0	
5732.0			1.4	28	7.7	19.0	
5734.0			1.4	29	8.3	19.0	
5736.0	4.9	340	1.4	27	8.7	19.0	B
5738.0			1.4	23	8.6	19.0	
5740.0			1.4	22	8.3	19.0	
5742.0	1.2	215	1.4	22	7.9	19.0	D
5744.0	3.1	281	1.4	23	7.7	19.0	D
5746.0			1.4	21	8.0	19.0	
5748.0			1.4	23	8.2	19.0	
5750.0			1.4	22	8.0	19.0	
5752.0			1.4	23	7.9	19.0	
5754.0			1.4	22	7.8	19.0	
5756.0	12.3	101	1.4	21	7.8	19.0	D
5758.0	7.4	93	1.5	21	7.9	19.0	D
5760.0	10.9	92	1.5	21	8.2	19.0	B
5762.0			1.5	20	8.3	19.0	
5764.0			1.5	17	8.1	19.0	
5766.0			1.6	15	7.7	19.0	
5768.0			1.6	16	7.7	19.0	
5770.0	13.4	94	1.6	17	7.9	19.0	D
5772.0	12.4	108	1.6	18	8.0	18.7	A
5774.0	9.3	114	1.7	19	7.8	18.4	A
5776.0	4.2	87	1.7	18	7.7	18.6	C
5778.0	6.7	49	1.7	17	8.0	18.8	A
5780.0	6.7	42	1.7	16	8.4	18.6	A
5782.0	8.6	118	1.7	17	8.3	18.2	A
5784.0	7.8	111	1.7	19	7.8	18.1	A
5786.0	5.4	79	1.7	17	7.7	18.2	A
5788.0	7.6	102	1.7	17	7.8	18.0	C
5790.0	5.8	60	1.8	16	8.0	17.9	A
5792.0	5.6	46	1.8	14	8.1	17.8	D
5794.0	5.3	60	1.9	14	8.1	17.5	D
5796.0	14.0	12	1.9	14	8.2	17.4	D
5798.0	13.2	22	2.0	11	8.2	17.5	D
5800.0			2.0	13	8.2	17.5	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5802.0	12.2	337	2.0	15	8.3	17.3	D
5804.0	3.6	348	2.1	13	8.3	17.1	B
5806.0	0.8	341	2.1	11	8.4	17.1	B
5808.0			2.1	12	8.1	17.2	
5810.0			2.1	14	7.7	17.0	
5812.0	7.8	131	2.2	14	7.9	16.7	D
5814.0	5.0	107	2.2	13	8.3	16.5	D
5816.0			2.2	13	8.6	16.4	
5818.0	9.1	97	2.3	13	8.7	16.2	D
5820.0	8.2	107	2.3	14	8.8	16.3	B
5822.0	3.6	64	2.4	13	8.4	16.0	B
5824.0	4.8	54	2.4	12	8.1	15.1	D
5826.0	11.8	128	2.5	12	8.8	15.0	D
5828.0	9.2	138	2.6	13	9.2	15.2	D
5830.0			2.6	16	9.2	15.4	
5832.0	18.2	40	2.6	17	8.9	15.4	D
5834.0			2.7	19	8.7	15.2	
5836.0			2.7	19	8.6	14.6	
5838.0			2.7	20	9.0	14.5	
5840.0			2.7	23	9.2	14.9	
5842.0			2.7	23	9.0	14.9	
5844.0	13.0	95	2.8	23	8.9	14.8	D
5846.0	12.9	73	2.8	22	8.7	14.2	B
5848.0	8.1	67	2.8	21	8.6	13.6	B
5850.0	9.2	73	2.8	23	8.7	13.9	B
5852.0	12.9	99	2.8	24	8.6	13.6	A
5854.0	12.1	101	2.9	19	8.3	12.8	A
5856.0	12.4	104	2.9	18	8.2	12.9	A
5858.0	12.6	102	2.9	20	8.2	13.1	A
5860.0	13.0	103	2.9	21	8.3	13.0	A
5862.0	10.7	108	2.9	22	8.4	13.1	A
5864.0	9.7	98	2.9	24	8.8	13.6	A
5866.0	7.7	119	2.9	26	9.0	13.8	C
5868.0	10.6	103	2.9	24	8.7	13.3	A
5870.0	11.0	110	3.0	23	8.4	13.0	A
5872.0	7.4	130	2.9	25	8.5	13.1	A
5874.0	4.9	261	3.0	25	8.6	13.1	B
5876.0	6.0	94	3.0	25	8.9	13.6	C
5878.0	3.7	38	3.0	26	9.3	14.1	C
5880.0			3.0	25	9.5	14.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5882.0			3.0	24	9.5	13.7	
5884.0			3.0	25	9.3	13.5	
5886.0			3.0	26	8.9	13.0	
5888.0			3.1	23	8.8	12.8	
5890.0	11.1	134	3.2	20	9.0	13.1	B
5892.0	9.9	138	3.2	20	9.8	13.5	B
5894.0			3.1	21	10.6	14.0	
5896.0	14.5	108	3.0	22	10.3	13.8	B
5898.0	13.3	106	3.0	25	9.8	13.6	D
5900.0	12.8	67	3.0	25	9.3	13.5	C
5902.0	10.3	116	3.0	10	8.9	13.5	C
5904.0	10.1	99	3.0	6	8.8	13.3	A
5906.0	10.3	100	3.0	11	8.7	13.1	A
5908.0	7.4	82	3.0	13	8.5	13.1	A
5910.0	9.8	130	3.0	21	8.7	13.1	A
5912.0	8.2	127	3.0	23	9.3	13.2	A
5914.0			3.0	25	9.4	13.3	
5916.0			3.0	23	9.1	13.4	
5918.0	11.2	109	3.0	20	9.4	13.4	A
5920.0	8.3	113	3.0	22	9.9	13.3	A
5922.0	7.1	119	3.0	23	10.0	13.1	C
5924.0			3.0	24	9.8	12.8	
5926.0	14.9	83	3.1	24	9.5	12.9	C
5928.0			3.1	24	9.4	13.2	
5930.0	5.2	78	3.2	22	8.9	13.4	A
5932.0	9.7	77	3.2	21	8.3	13.3	A
5934.0	6.4	93	3.2	22	8.8	13.2	A
5936.0	5.5	103	3.2	22	9.4	13.1	A
5938.0	11.7	75	3.2	21	9.1	13.0	A
5940.0	9.8	82	3.2	22	8.5	12.9	B
5942.0	9.3	91	3.2	23	8.2	12.9	B
5944.0			3.2	23	8.6	12.9	
5946.0	15.3	104	3.2	23	9.9	13.1	D
5948.0			3.2	24	9.9	13.1	
5950.0	19.9	216	3.2	24	9.4	13.0	D
5952.0	5.0	113	3.2	23	9.7	13.0	B
5954.0	12.4	243	3.2	22	9.2	12.9	B
5956.0	14.8	231	3.2	22	8.9	12.9	B
5958.0	12.7	232	3.2	24	9.2	13.1	D
5960.0	9.7	69	3.2	24	9.1	13.3	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5962.0	8.6	73	3.2	24	9.3	13.2	B
5964.0			3.2	24	9.6	13.1	
5966.0	6.3	41	3.2	24	8.9	12.7	D
5968.0			3.2	24	8.0	12.3	
5970.0			3.3	24	7.8	12.1	
5972.0			3.3	24	7.9	12.0	
5974.0			3.3	23	8.7	12.2	
5976.0	20.3	87	3.3	23	9.0	12.3	D
5978.0	21.7	89	3.2	22	8.7	12.3	B
5980.0	24.3	94	3.2	23	8.3	12.0	A
5982.0	16.0	107	3.1	24	8.0	11.6	A
5984.0	21.5	95	3.1	24	8.2	11.5	A
5986.0			3.1	25	8.5	11.7	
5988.0			3.1	25	8.4	11.9	
5990.0	16.6	113	3.1	25	8.4	11.9	A
5992.0	21.0	101	3.1	26	8.5	12.0	A
5994.0	26.4	86	3.1	28	8.4	11.9	C
5996.0			3.1	28	8.3	11.9	
5998.0			3.2	28	8.2	11.9	
6000.0			3.2	27	8.2	11.8	
6002.0	57.7	104	3.2	26	8.4	11.9	B
6004.0	55.8	101	3.3	27	8.6	11.9	B
6006.0			3.3	28	8.7	11.9	
6008.0			3.3	27	8.6	11.9	
6010.0			3.3	28	8.5	11.8	
6012.0			3.3	29	8.5	11.8	
6014.0			3.3	29	8.5	11.9	
6016.0			3.3	28	8.4	11.9	
6018.0			3.4	27	9.3	12.0	
6020.0			3.4	27	8.3	12.1	
6022.0	22.8	107	3.4	26	8.5	12.2	C
6024.0	20.9	105	3.3	25	8.6	12.3	A
6026.0	36.1	104	3.3	26	8.3	12.5	D
6028.0	33.0	95	3.3	26	8.2	12.7	D
6030.0	18.7	109	3.3	27	8.4	12.7	A
6032.0	23.6	108	3.3	27	8.6	12.6	A
6034.0	23.7	106	3.3	26	8.7	12.5	A
6036.0	20.7	98	3.3	25	8.6	12.5	A
6038.0	23.3	93	3.3	25	9.0	12.5	A
6040.0	22.5	99	3.4	25	9.2	12.6	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6042.0	29.5	101	3.4	26	8.8	12.7	C
6044.0	26.2	101	3.4	27	9.4	12.8	A
6046.0	34.7	101	3.4	26	9.5	12.8	C
6048.0			3.4	25	8.9	13.2	
6050.0			3.4	26	8.5	13.6	
6052.0	34.2	96	3.4	26	8.4	13.7	C
6054.0	30.7	95	3.4	26	8.3	13.6	C
6056.0	24.5	102	3.4	26	8.7	13.4	A
6058.0	29.6	101	3.4	26	9.1	13.4	A
6060.0	23.3	94	3.4	28	8.8	13.3	C
6062.0	28.5	101	3.4	30	8.8	13.1	A
6064.0	31.2	97	3.4	28	9.7	13.4	C
6066.0			3.3	26	10.0	13.1	
6068.0			3.2	26	9.4	12.8	
6070.0	39.9	89	3.2	27	8.8	13.0	A
6072.0	43.4	94	3.2	27	8.6	13.1	A
6074.0	37.8	94	3.2	26	8.7	13.2	A
6076.0	28.0	101	3.2	26	8.7	13.4	A
6078.0	27.5	104	3.2	26	8.9	13.9	A
6080.0	17.2	95	3.2	26	9.4	14.5	D
6082.0			3.2	27	9.6	14.4	
6084.0			3.2	28	9.5	14.0	
6086.0			3.1	27	9.0	13.7	
6088.0			3.1	26	8.7	13.6	
6090.0	9.1	89	3.1	27	8.6	13.5	D
6092.0	7.9	79	3.0	26	8.5	13.4	B
6094.0	12.9	80	3.0	26	8.1	13.2	B
6096.0			3.1	27	7.9	13.1	
6098.0	39.5	85	3.2	27	7.8	13.0	B
6100.0			3.2	26	8.1	13.0	
6102.0	21.7	94	3.1	27	8.6	13.0	D
6104.0	23.2	94	3.1	27	8.4	12.7	D
6106.0			3.1	27	8.2	12.5	
6108.0			3.0	27	8.2	12.4	
6110.0	36.0	105	3.0	25	8.1	12.4	D
6112.0	27.1	107	3.0	24	8.0	12.4	B
6114.0	29.6	110	2.9	24	8.0	12.4	B
6116.0	28.0	111	2.9	24	8.1	12.5	B
6118.0			2.9	26	8.2	12.5	
6120.0	10.8	269	2.9	26	8.3	12.5	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6122.0	7.6	268	2.9	26	8.2	12.4	B
6124.0			2.9	27	8.0	12.3	
6126.0	12.7	247	2.9	27	8.0	12.3	D
6128.0			2.8	27	8.1	12.4	
6130.0			2.8	26	8.6	12.7	
6132.0			2.8	27	8.6	12.9	
6134.0			2.8	27	8.2	12.7	
6136.0			2.9	28	8.1	12.7	
6138.0			2.9	26	8.1	12.7	
6140.0	20.7	102	3.0	25	8.3	12.8	A
6142.0	19.6	108	2.9	24	10.5	13.7	A
6144.0	16.5	109	2.7	24	11.5	14.1	A
6146.0	20.3	102	2.7	25	9.6	13.2	A
6148.0	23.7	101	2.7	24	8.6	12.7	A
6150.0	17.7	102	2.8	23	8.7	12.6	A
6152.0	13.6	87	2.8	23	8.8	12.7	A
6154.0	8.7	84	2.7	24	8.8	13.0	A
6156.0	14.0	107	2.7	24	9.0	13.6	A
6158.0	12.2	108	2.8	25	9.1	14.1	A
6160.0			2.8	29	9.2	14.2	
6162.0			2.8	29	9.6	14.4	
6164.0	12.2	107	2.8	25	9.7	14.5	C
6166.0	17.7	116	2.7	24	9.1	14.5	A
6168.0	17.5	105	2.5	26	8.8	14.3	A
6170.0	10.0	115	2.5	27	9.4	14.2	C
6172.0	16.0	107	2.5	25	9.7	14.3	C
6174.0	15.4	107	2.5	25	8.9	14.3	C
6176.0	9.8	103	2.5	25	8.6	14.2	A
6178.0	12.2	100	2.5	25	8.7	14.3	A
6180.0	15.8	95	2.5	25	8.6	14.2	A
6182.0	21.7	96	2.4	24	8.6	13.7	A
6184.0	19.5	92	2.4	24	8.5	13.5	A
6186.0	20.2	94	2.4	24	8.3	13.5	A
6188.0	14.6	97	2.4	23	8.1	13.6	C
6190.0			2.4	22	8.2	13.6	
6192.0	15.6	84	2.4	22	8.3	13.6	C
6194.0	17.3	96	2.4	25	8.0	13.3	A
6196.0	12.8	86	2.5	25	8.2	13.1	A
6198.0	18.5	97	2.5	23	8.7	13.0	A
6200.0	18.8	96	2.5	22	8.6	12.9	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6202.0	18.7	88	2.6	21	8.5	12.6	A
6204.0	28.4	125	2.7	21	8.6	12.5	D
6206.0	23.9	124	2.8	22	9.2	12.4	B
6208.0	12.7	126	2.9	20	11.3	13.1	D
6210.0	3.8	158	2.7	19	11.2	13.5	D
6212.0	11.7	103	2.6	21	9.1	12.9	D
6214.0	19.9	111	2.6	23	8.6	12.6	D
6216.0	18.7	98	2.7	26	8.7	12.4	D
6218.0	20.2	107	2.7	26	9.0	11.9	D
6220.0	20.6	114	2.8	27	9.5	11.1	D
6222.0	25.5	118	2.8	30	9.8	10.6	B
6224.0	18.4	90	2.8	31	9.6	9.8	A
6226.0	17.8	88	2.9	30	9.5	9.3	A
6228.0	15.4	83	2.8	30	9.7	9.6	A
6230.0	16.1	83	2.7	30	9.6	9.8	A
6232.0	22.1	72	2.7	30	9.4	9.5	A
6234.0	31.7	72	2.7	31	9.3	9.3	C
6236.0	24.2	83	2.6	31	9.3	9.3	C
6238.0	21.1	79	2.5	31	9.3	9.3	A
6240.0	16.1	80	2.5	30	9.4	9.4	A
6242.0	15.3	83	2.5	28	9.3	9.4	A
6244.0	21.3	83	2.4	27	9.3	9.4	A
6246.0	19.8	79	2.3	26	9.3	9.5	A
6248.0	18.3	99	2.3	26	9.3	9.5	A
6250.0	15.2	95	2.3	24	9.3	9.6	A
6252.0	15.1	92	2.3	23	9.3	9.6	A
6254.0	16.6	86	2.3	23	9.3	9.5	A
6256.0	16.4	84	2.3	22	9.3	9.5	A
6258.0	15.1	78	2.2	21	9.5	9.6	A
6260.0	17.1	85	2.3	22	9.5	9.7	A
6262.0	16.2	98	2.3	22	9.4	9.5	A
6264.0	17.6	95	2.3	20	9.3	9.5	A
6266.0	17.4	97	2.3	20	9.2	9.5	A
6268.0	18.7	97	2.3	21	9.2	9.8	A
6270.0	18.2	86	2.1	20	9.7	10.3	A
6272.0	17.7	90	2.0	19	9.4	10.1	A
6274.0	19.3	91	2.0	19	8.8	9.5	A
6276.0	19.8	314	2.0	19	8.8	9.5	D
6278.0	18.6	321	2.0	20	9.3	10.0	D
6280.0	30.3	65	1.9	20	9.4	10.0	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST #A
6282.0	37.9	66	1.9	19	9.0	9.2	B
6284.0	37.5	69	1.9	18	8.9	9.0	D
6286.0			2.0	17	8.8	9.0	
6288.0			2.0	17	8.9	9.1	
6290.0			2.0	19	9.8	10.1	
6292.0	9.9	124	2.0	21	9.9	10.5	D
6294.0	19.0	118	2.0	18	9.1	9.8	B
6296.0	20.6	115	2.0	14	8.9	9.4	B
6298.0	24.2	110	2.1	11	8.7	8.8	B
6300.0			2.1	9	8.8	8.6	
6302.0			2.2	8	9.1	8.7	
6304.0			2.2	7	9.3	8.9	
6306.0			2.2	5	9.3	9.0	
6308.0			2.2	7	10.3	9.9	
6310.0			2.1	8	10.6	10.4	
6312.0			2.1	6	9.5	9.3	
6314.0			2.1	3	9.2	8.8	
6316.0			2.0	360	9.0	8.7	
6318.0			2.0	1	8.7	8.4	
6320.0			2.0	4	8.7	8.4	
6322.0			2.1	3	8.7	8.4	
6324.0			2.1	3	8.7	8.5	
6326.0			2.1	1	8.7	8.5	
6328.0			2.1	360	8.7	8.5	
6330.0			2.1	2	8.8	8.6	
6332.0			2.1	3	8.9	8.6	
6334.0			2.0	2	8.9	8.6	
6336.0			2.0	360	9.0	8.6	
6338.0			2.0	359	9.1	8.5	
6340.0			2.0	360	9.1	8.4	
6342.0	34.3	99	2.0	360	9.2	8.5	C
6344.0	29.6	114	1.9	359	9.2	8.5	C
6346.0	28.2	110	1.9	358	9.3	8.6	C
6348.0	29.5	113	1.9	358	9.3	8.7	A
6350.0	29.6	112	1.9	358	9.4	8.7	A
6352.0	36.6	111	1.9	358	9.4	8.7	C
6354.0	28.3	111	1.9	359	9.3	8.6	A
6356.0	27.4	108	1.9	358	9.1	8.6	A
6358.0	10.8	273	2.0	356	8.9	8.5	B
6360.0	11.3	268	2.0	357	8.8	8.5	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6362.0			2.0	360	8.7	8.6	
6364.0			2.0	2	8.6	8.6	
6366.0			2.0	6	8.5	8.7	
6368.0			2.0	9	8.6	8.7	
6370.0			1.9	10	8.8	8.7	
6372.0			1.9	11	8.8	8.8	
6374.0			1.9	11	8.7	8.7	
6376.0			1.9	11	8.8	8.7	
6378.0			1.9	10	9.0	8.7	
6380.0	24.2	109	1.8	8	9.0	8.8	B
6382.0	25.6	115	1.8	6	9.0	8.8	D
6384.0	23.1	112	1.8	4	8.9	8.7	B
6386.0	22.3	128	1.8	2	8.9	8.8	D
6388.0	30.3	115	1.8	359	8.9	8.8	D
6390.0			1.8	357	8.6	8.7	
6392.0			1.8	356	8.5	8.6	
6394.0			1.8	355	8.5	8.5	
6396.0			1.8	354	8.4	8.5	
6398.0	16.7	127	1.9	356	8.4	8.5	D
6400.0			1.9	357	8.4	8.5	
6402.0			1.9	357	8.4	8.5	
6404.0			1.9	358	8.4	8.5	
6406.0	48.6	266	1.9	358	8.4	8.5	B
6408.0	46.7	265	1.9	359	8.4	8.4	D
6410.0			1.9	1	8.4	8.5	
6412.0	26.9	100	1.9	2	8.5	8.5	D
6414.0	28.3	104	1.8	4	8.5	8.4	B
6416.0	41.8	88	1.8	6	8.5	8.4	B
6418.0			1.8	9	8.5	8.4	
6420.0			1.8	10	8.4	8.4	
6422.0	28.9	52	1.7	9	8.4	8.5	B
6424.0	29.7	55	1.7	8	8.4	8.5	B
6426.0			1.7	6	8.4	8.5	
6428.0			1.7	5	8.4	8.5	
6430.0	28.2	65	1.7	3	8.4	8.5	D
6432.0	28.3	62	1.7	359	8.4	8.4	D
6434.0			1.7	355	8.3	8.4	
6436.0			1.7	354	8.3	8.4	
6438.0			1.7	356	8.4	8.4	
6440.0			1.7	358	8.4	8.5	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6442.0			1.7	360	8.4	8.5	
6444.0			1.7	359	8.4	8.5	
6446.0			1.8	360	8.4	8.5	
6448.0			1.8	1	8.4	8.5	
6450.0			1.8	5	8.5	8.6	
6452.0			1.8	8	8.5	8.8	
6454.0			1.8	9	8.6	9.1	
6456.0			1.8	7	8.6	9.2	
6458.0			1.9	5	8.6	9.1	
6460.0			1.9	4	8.7	9.0	
6462.0	21.0	70	1.8	5	8.7	8.8	D
6464.0	21.5	73	1.8	6	8.7	8.8	D
6466.0	24.5	285	1.8	4	8.8	8.9	B
6468.0	19.3	291	1.8	3	8.8	9.0	D
6470.0			1.8	2	8.8	9.1	
6472.0			1.8	1	8.8	9.3	
6474.0			1.8	0	8.8	9.4	
6476.0	27.2	99	1.8	359	8.8	9.4	B
6478.0	28.2	96	1.8	359	8.8	9.5	B
6480.0			1.8	360	8.8	9.5	
6482.0			1.8	359	9.0	9.7	
6484.0			1.8	359	9.2	9.8	
6486.0	6.4	161	1.7	359	9.1	9.8	D
6488.0			1.7	1	9.0	9.7	
6490.0	5.0	148	1.7	2	9.0	9.7	D
6492.0			1.7	2	9.0	9.7	
6494.0	39.6	247	1.7	3	8.9	9.7	D
6496.0	39.6	249	1.7	3	8.7	9.5	D
6498.0			1.7	4	8.6	9.2	
6500.0	24.1	102	1.7	4	8.6	9.1	D
6502.0	16.9	125	1.7	3	8.6	9.2	B
6504.0	15.3	120	1.7	4	8.7	9.3	B
6506.0	27.0	93	1.7	5	8.6	9.1	D
6508.0	24.4	96	1.7	5	8.6	9.0	B
6510.0			1.7	7	8.7	9.0	
6512.0			1.7	8	8.7	9.0	
6514.0			1.7	8	8.8	9.0	
6516.0			1.6	8	8.8	8.9	
6518.0			1.6	8	8.8	8.9	
6520.0			1.7	8	8.8	9.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6522.0			1.7	9	9.0	9.1	
6524.0			1.7	8	9.1	9.1	
6526.0			1.6	7	9.1	9.1	
6528.0	31.2	99	1.6	7	9.0	9.1	D
6530.0			1.6	5	8.7	8.9	
6532.0			1.6	2	8.4	8.6	
6534.0			1.6	360	8.4	8.5	
6536.0			1.6	10	8.5	8.5	
6538.0	38.1	95	1.6	22	8.6	8.5	D
6540.0	34.1	103	1.6	18	8.6	8.5	B
6542.0	34.7	103	1.6	11	8.4	8.4	D
6544.0			1.6	10	8.5	8.4	
6546.0			1.7	13	8.5	8.5	
6548.0			1.7	12	8.5	8.5	
6550.0			1.7	9	8.5	8.5	
6552.0			1.7	7	8.5	8.4	
6554.0			1.7	9	8.5	8.4	
6556.0			1.8	11	8.5	8.4	
6558.0			1.8	11	8.5	8.5	
6560.0			1.8	11	8.5	8.5	
6562.0			1.8	10	8.5	8.5	
6564.0			1.8	10	8.5	8.6	
6566.0	22.1	311	1.8	10	8.6	8.7	D
6568.0			1.8	10	8.7	8.7	
6570.0			1.8	9	8.9	8.8	
6572.0	40.1	277	1.8	10	9.0	8.9	D
6574.0	40.6	277	1.8	10	8.9	8.8	D
6576.0	23.8	309	1.9	9	8.6	8.7	B
6578.0	23.6	318	1.9	8	8.5	8.7	D
6580.0			2.0	8	8.6	8.8	
6582.0			2.1	10	8.7	8.8	
6584.0			2.1	11	8.7	8.8	
6586.0			2.1	12	8.7	8.8	
6588.0	35.0	112	2.2	9	8.9	9.0	D
6590.0	30.9	109	2.2	11	9.0	9.0	D
6592.0	32.2	111	2.1	16	9.1	8.9	B
6594.0			2.1	9	9.2	9.1	
6596.0			2.1	355	9.1	9.1	
6598.0			2.1	351	9.0	9.1	
6600.0			2.1	352	8.9	9.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6602.0			2.1	349	8.8	8.9	
6604.0			2.0	350	8.8	8.8	
6606.0			2.0	1	8.6	8.7	
6608.0			2.0	9	8.5	8.7	
6610.0			2.1	11	8.5	8.5	
6612.0			2.0	11	8.5	8.6	
6614.0			2.1	13	8.4	8.6	
6616.0			2.1	13	8.4	8.6	
6618.0			2.1	9	8.4	8.6	
6620.0	11.1	224	2.1	8	8.4	8.5	D
6622.0	11.7	221	2.1	11	8.4	8.4	B
6624.0	12.1	237	2.1	12	8.4	8.4	D
6626.0	40.8	126	2.1	13	8.4	8.5	B
6628.0	5.0	265	2.2	12	8.5	8.5	D
6630.0	8.5	248	2.2	10	8.5	8.5	D
6632.0			2.2	9	8.5	8.5	
6634.0			2.2	7	8.5	8.5	
6636.0	4.6	275	2.2	7	8.5	8.4	D
6638.0			2.2	8	8.5	8.5	
6640.0			2.2	10	8.5	8.4	
6642.0			2.1	11	8.5	8.3	
6644.0			2.1	11	8.5	8.3	
6646.0			2.0	10	8.5	8.5	
6648.0			2.0	10	8.6	8.5	
6650.0	34.3	232	2.0	13	8.6	8.4	D
6652.0	27.9	232	2.0	13	8.6	8.4	B
6654.0	27.3	228	1.9	11	8.6	8.5	B
6656.0	24.3	223	1.9	9	8.5	8.5	D
6658.0			1.9	8	8.4	8.3	
6660.0			2.0	10	8.4	8.4	
6662.0			1.9	11	8.4	8.4	
6664.0			2.0	11	8.3	8.4	
6666.0			2.0	14	8.3	8.3	
6668.0			2.0	15	8.3	8.3	
6670.0	45.5	233	2.0	14	8.3	8.4	D
6672.0	44.9	233	2.0	14	8.3	8.4	B
6674.0			2.0	16	8.3	8.4	
6676.0			2.0	16	8.3	8.4	
6678.0	42.9	231	2.1	14	8.3	8.4	D
6680.0			2.1	14	8.3	8.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST #A
6682.0			2.1	16	8.3	8.4	
6684.0			2.1	17	8.3	8.4	
6686.0			2.1	17	8.3	8.4	
6688.0	26.3	96	2.1	18	8.3	8.5	B
6690.0	29.5	86	2.2	19	8.3	8.5	D
6692.0			2.2	20	8.3	8.5	
6694.0			2.2	20	8.4	8.5	
6696.0			2.2	19	8.5	8.5	
6698.0	25.7	97	2.3	18	8.5	8.7	B
6700.0	25.9	94	2.3	16	8.5	8.7	B
6702.0	28.0	88	2.3	15	8.4	8.6	B
6704.0			2.3	15	8.4	8.5	
6706.0	18.5	82	2.3	15	8.4	8.5	D
6708.0	32.0	89	2.3	14	8.3	8.5	D
6710.0	33.5	89	2.2	13	8.3	8.5	D
6712.0	29.2	109	2.2	13	8.4	8.5	D
6714.0			2.2	13	8.4	8.5	
6716.0			2.2	13	8.3	8.5	
6718.0			2.2	13	8.4	8.5	
6720.0			2.1	12	8.4	8.5	
6722.0			2.1	10	8.4	8.5	
6724.0			2.1	9	8.3	8.5	
6726.0	17.0	229	2.1	9	8.3	8.5	D
6728.0	18.0	231	2.1	9	8.3	8.5	B
6730.0	5.6	186	2.1	10	8.3	8.6	D
6732.0	11.4	151	2.1	10	8.3	8.7	D
6734.0	9.7	202	2.1	11	8.3	8.7	D
6736.0	4.3	141	2.1	11	8.3	8.8	B
6738.0	5.2	152	2.1	12	8.3	8.8	B
6740.0	5.8	164	2.1	13	8.3	8.8	A
6742.0	3.1	153	2.1	15	8.3	8.8	A
6744.0	3.1	168	2.1	15	8.3	8.8	C
6746.0			2.1	14	8.3	8.7	
6748.0			2.1	13	8.4	8.6	
6750.0	11.9	210	2.0	12	8.4	8.6	C
6752.0	4.4	156	2.0	12	8.3	8.6	A
6754.0	9.4	91	2.0	12	8.3	8.7	A
6756.0	9.6	87	2.0	12	8.4	8.7	A
6758.0	1.0	162	2.0	11	8.4	8.6	C
6760.0			2.0	11	8.4	8.5	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6762.0			2.0	12	8.4	8.5	
6764.0			2.0	13	8.4	8.5	
6766.0	14.7	231	2.0	12	8.4	8.5	B
6768.0			2.1	12	8.4	8.5	
6770.0			2.0	12	8.4	8.5	
6772.0			2.0	12	8.4	8.4	
6774.0			2.1	10	8.4	8.4	
6776.0	13.6	233	2.1	10	8.4	8.4	D
6778.0			2.1	11	8.4	8.4	
6780.0	23.6	185	2.1	12	8.4	8.4	D
6782.0	22.9	181	2.1	12	8.4	8.4	D
6784.0			2.1	11	8.4	8.4	
6786.0			2.1	12	8.4	8.4	
6788.0			2.1	13	8.4	8.4	
6790.0	12.9	43	2.1	14	8.4	8.4	B
6792.0	10.5	53	2.1	15	8.4	8.4	B
6794.0	21.1	198	2.1	16	8.4	8.4	B
6796.0			2.0	16	8.4	8.4	
6798.0	11.1	32	2.0	15	8.4	8.3	D
6800.0	9.4	234	2.0	16	8.4	8.4	A
6802.0	9.5	239	2.0	18	8.4	8.4	A
6804.0	9.5	235	2.0	19	8.5	8.3	A
6806.0	9.7	239	2.1	19	8.6	8.3	A
6808.0	9.2	255	2.1	20	8.6	8.3	A
6810.0	14.0	269	2.0	22	8.7	8.3	A
6812.0	13.8	266	2.1	21	8.7	8.4	A
6814.0	12.5	250	2.1	18	8.6	8.5	A
6816.0	12.5	246	2.1	15	8.5	8.5	A
6818.0	6.8	260	2.1	13	8.4	8.4	A
6820.0	6.4	248	2.1	12	8.4	8.4	A
6822.0	4.6	237	2.1	12	8.4	8.4	C
6824.0	6.7	231	2.1	11	8.4	8.4	A
6826.0	10.9	233	2.0	11	8.5	8.4	A
6828.0			2.0	12	8.5	8.4	
6830.0	9.5	224	1.9	14	8.5	8.4	C
6832.0	8.6	236	1.9	16	8.6	8.4	C
6834.0	3.8	139	1.9	15	8.8	8.5	B
6836.0	3.7	133	1.8	13	9.2	8.6	B
6838.0	9.6	315	1.9	12	9.8	8.6	D
6840.0	13.5	288	1.9	12	9.9	8.5	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST mA
6842.0	19.7	300	1.9	10	9.7	8.4	D
6844.0			2.0	9	9.5	8.3	
6846.0			2.1	6	9.3	8.3	
6848.0	8.6	168	2.1	4	9.2	8.3	D
6850.0	1.2	252	2.2	5	9.1	8.4	D
6852.0	1.3	291	2.3	6	9.1	8.5	D
6854.0	2.3	281	2.3	7	9.1	8.6	C
6856.0	6.9	347	2.3	8	9.2	8.5	C
6858.0	5.0	18	2.3	8	9.2	8.5	A
6860.0	4.2	46	2.4	9	9.3	8.4	A
6862.0	7.4	328	2.3	9	9.3	8.5	A
6864.0	9.5	311	2.3	10	9.3	8.4	A
6866.0	13.3	313	2.3	9	9.2	8.3	C
6868.0			2.3	8	9.1	8.3	
6870.0			2.3	6	9.0	8.3	
6872.0	6.7	9	2.3	4	9.1	8.3	C
6874.0	44.4	266	2.3	3	9.3	8.3	D
6876.0	43.6	263	2.3	3	9.2	8.4	B
6878.0			2.3	2	8.9	8.7	
6880.0			2.3	359	8.7	8.8	
6882.0	22.0	258	2.3	359	8.6	9.0	D
6884.0	20.4	260	2.3	358	8.5	9.1	B
6886.0			2.3	358	8.4	9.0	
6888.0			2.3	358	8.4	8.9	
6890.0			2.3	359	8.4	8.8	
6892.0			2.3	359	8.4	8.8	
6894.0	8.3	227	2.2	359	8.4	8.8	D
6896.0	12.0	238	2.2	359	8.3	8.8	B
6898.0	11.5	235	2.2	359	8.3	8.9	D
6900.0	10.4	231	2.2	358	8.4	9.0	D
6902.0	14.6	223	2.2	358	8.4	9.1	D
6904.0			2.2	359	8.4	9.1	
6906.0			2.2	360	8.4	9.1	
6908.0			2.2	359	8.5	9.2	
6910.0			2.2	1	8.7	9.4	
6912.0			2.2	5	8.8	9.3	
6914.0			2.2	8	8.7	8.9	
6916.0			2.2	9	8.6	8.7	
6918.0			2.2	9	8.6	8.7	
6920.0			2.2	9	8.6	8.7	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6922.0			2.3	10	8.5	8.7	
6924.0			2.3	10	8.5	8.7	
6926.0			2.3	11	8.6	8.6	
6928.0			2.3	8	8.6	8.7	
6930.0			2.4	5	8.6	8.8	
6932.0			2.4	4	8.6	8.7	
6934.0			2.4	3	8.6	8.6	
6936.0			2.4	2	8.5	8.5	
6938.0			2.4	1	8.5	8.5	
6940.0			2.4	1	8.6	8.6	
6942.0	1.6	268	2.4	2	8.6	8.8	D
6944.0	0.9	171	2.5	3	8.6	8.7	B
6946.0	2.7	344	2.5	4	8.7	8.6	D
6948.0	1.5	233	2.5	6	8.8	8.6	D
6950.0			2.5	7	8.8	8.6	
6952.0	9.1	313	2.5	8	8.8	8.5	D
6954.0	3.0	153	2.5	9	8.7	8.5	B
6956.0			2.5	9	8.6	8.4	
6958.0			2.4	9	8.5	8.4	
6960.0			2.4	8	8.4	8.4	
6962.0			2.4	9	8.4	8.4	
6964.0			2.3	9	8.4	8.5	
6966.0	16.6	86	2.3	9	8.4	8.5	B
6968.0	14.7	77	2.3	9	8.5	8.5	B
6970.0			2.2	9	8.5	8.5	
6972.0	17.1	61	2.2	9	8.4	8.4	D
6974.0			2.2	9	8.4	8.4	
6976.0			2.2	10	8.5	8.4	
6978.0			2.2	11	8.5	8.4	
6980.0			2.2	10	8.5	8.4	
6982.0			2.2	9	8.5	8.4	
6984.0			2.2	9	8.5	8.5	
6986.0			2.2	9	8.6	8.5	
6988.0			2.2	9	8.6	8.5	
6990.0			2.2	10	8.6	8.7	
6992.0			2.2	9	8.6	8.9	
6994.0			2.1	8	8.5	8.9	
6996.0			2.1	10	8.5	8.9	
6998.0			2.1	11	8.5	9.1	
7000.0			2.1	9	8.6	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7002.0			2.1	9	8.6	9.6	
7004.0	23.2	160	2.1	9	8.6	9.6	B
7006.0	21.2	161	2.0	10	8.5	9.5	D
7008.0	21.0	160	2.0	9	8.6	9.6	B
7010.0			2.1	7	8.6	9.7	
7012.0			2.1	5	8.6	9.8	
7014.0			2.1	2	8.8	10.0	
7016.0			2.1	357	8.8	10.4	
7018.0			2.2	353	8.6	10.9	
7020.0			2.3	350	8.4	11.1	
7022.0			2.3	345	8.4	11.2	
7024.0			2.4	342	8.5	11.2	
7026.0			2.5	340	8.4	11.2	
7028.0			2.6	338	8.3	11.2	
7030.0			2.7	337	8.2	11.3	
7032.0			2.7	337	8.1	11.4	
7034.0	15.0	23	2.7	338	8.1	11.5	D
7036.0	19.1	39	2.7	337	8.2	11.4	D
7038.0	12.6	5	2.8	335	8.2	11.1	D
7040.0	13.7	26	2.8	335	8.1	11.0	D
7042.0	18.4	29	2.9	336	8.4	11.2	D
7044.0	16.4	26	2.9	336	8.8	11.6	D
7046.0			2.9	334	8.9	11.9	
7048.0			2.9	333	8.8	12.1	
7050.0			2.9	333	8.7	12.3	
7052.0			2.9	333	8.6	12.3	
7054.0	10.6	11	2.9	332	8.6	12.2	C
7056.0	2.7	28	2.9	331	8.7	12.0	C
7058.0	1.6	74	2.9	332	8.7	12.0	A
7060.0	8.3	33	3.0	331	8.8	12.0	A
7062.0	8.8	29	3.0	330	8.9	12.0	A
7064.0	5.8	19	3.0	331	8.8	11.8	A
7066.0	11.5	33	2.9	333	8.8	11.6	A
7068.0	9.6	43	2.9	333	8.8	11.5	A
7070.0	8.1	48	2.9	332	8.8	11.3	A
7072.0	3.4	20	2.9	332	9.0	11.1	C
7074.0	9.7	23	2.8	333	8.9	10.5	D
7076.0	7.2	34	2.8	334	8.8	9.9	B
7078.0	2.7	301	2.8	333	9.0	9.9	B
7080.0	7.7	43	2.8	333	9.1	9.8	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7082.0	4.0	235	2.9	333	9.0	9.5	D
7084.0	30.7	288	2.9	332	8.9	9.3	B
7086.0			2.9	332	9.1	9.4	
7088.0			2.9	331	9.4	9.5	
7090.0			2.9	329	9.8	9.7	
7092.0			3.0	327	9.7	9.6	
7094.0			3.0	327	9.3	9.4	
7096.0			3.0	328	9.2	9.4	
7098.0			3.0	328	9.2	9.4	
7100.0			3.0	328	9.2	9.3	
7102.0			3.0	326	9.1	9.2	
7104.0			3.0	325	9.0	9.0	
7106.0	10.6	151	3.0	326	8.9	9.1	D
7108.0			3.0	326	8.8	9.0	
7110.0	3.0	131	3.0	325	8.7	8.8	B
7112.0	3.0	118	3.1	324	8.6	8.7	B
7114.0	6.3	29	3.1	323	8.6	8.7	D
7116.0	4.5	110	3.1	324	8.7	8.7	D
7118.0			3.2	323	8.9	9.0	
7120.0	1.7	172	3.2	322	9.0	9.2	B
7122.0	1.1	261	3.2	321	8.9	8.9	D
7124.0			3.3	321	8.6	8.7	
7126.0	4.6	227	3.3	320	8.5	8.7	D
7128.0	3.0	291	3.3	320	8.5	8.7	D
7130.0	4.7	165	3.3	320	8.5	8.7	D
7132.0	3.7	128	3.4	320	8.6	8.8	D
7134.0			3.4	319	8.6	8.8	
7136.0			3.4	318	8.6	8.8	
7138.0			3.4	319	8.6	8.8	
7140.0			3.4	319	8.8	9.0	
7142.0			3.4	318	8.7	8.9	
7144.0			3.4	317	8.6	8.7	
7146.0			3.5	318	8.7	8.8	
7148.0			3.5	317	8.8	9.0	
7150.0			3.5	318	8.9	9.2	
7152.0			3.5	318	8.9	9.2	
7154.0			3.4	318	8.9	9.3	
7156.0			3.4	318	8.9	9.2	
7158.0			3.4	317	8.9	9.2	
7160.0			3.4	318	8.8	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST 'sA
7162.0			3.5	318	8.7	9.6	
7164.0			3.5	318	8.7	9.7	
7166.0			3.5	318	8.7	9.5	
7168.0			3.5	317	8.7	9.3	
7170.0			3.5	318	8.7	9.3	
7172.0			3.5	317	8.7	9.2	
7174.0			3.5	316	8.6	9.1	
7176.0	2.7	242	3.6	317	8.6	9.2	D
7178.0	4.1	207	3.6	318	8.7	9.2	B
7180.0	12.1	287	3.6	318	8.7	9.2	D
7182.0	9.3	213	3.6	318	8.7	9.2	D
7184.0	7.1	259	3.5	318	8.7	9.2	D
7186.0	9.6	169	3.5	318	8.7	9.3	D
7188.0	8.5	181	3.5	318	8.7	9.4	D
7190.0	3.8	280	3.5	318	8.7	9.6	D
7192.0			3.5	318	8.7	9.7	
7194.0	5.3	290	3.5	318	8.7	9.8	B
7196.0			3.5	318	8.6	9.9	
7198.0	21.0	275	3.4	318	8.7	9.9	D
7200.0	11.2	259	3.4	318	8.7	9.9	D
7202.0	14.2	311	3.4	320	8.8	9.8	D
7204.0	15.7	312	3.4	320	8.9	9.7	D
7206.0	17.9	288	3.4	320	8.9	9.6	B
7208.0	15.7	282	3.4	320	8.8	9.5	D
7210.0	6.3	209	3.4	319	8.7	9.3	D
7212.0			3.4	319	8.7	9.1	
7214.0	24.7	279	3.4	319	8.7	9.1	C
7216.0	21.6	279	3.4	320	8.7	9.1	A
7218.0	24.0	281	3.4	320	8.6	8.9	A
7220.0	23.8	281	3.4	320	8.5	8.8	A
7222.0	41.6	318	3.4	319	8.5	8.7	D
7224.0			3.5	319	8.4	8.7	
7226.0	45.4	315	3.5	319	8.4	8.6	D
7228.0	45.0	314	3.5	319	8.4	8.6	D
7230.0			3.5	319	8.4	8.6	
7232.0			3.5	319	8.4	8.6	
7234.0	36.2	266	3.5	319	8.4	8.7	D
7236.0			3.5	318	8.4	8.7	
7238.0			3.5	317	8.5	8.7	
7240.0			3.5	317	8.5	8.7	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST #A
7242.0			3.5	315	8.5	8.7	
7244.0			3.4	313	8.5	8.7	
7246.0			3.4	310	8.5	8.7	
7248.0			3.4	307	8.6	8.7	
7250.0			3.4	305	8.6	8.9	
7252.0			3.4	305	8.7	9.1	
7254.0			3.4	307	8.8	9.2	
7256.0	6.7	264	3.4	310	8.7	9.2	A
7258.0	3.5	203	3.4	314	8.7	9.3	A
7260.0	4.1	218	3.4	315	8.8	9.4	A
7262.0	6.9	193	3.4	316	8.9	9.4	A
7264.0	6.6	211	3.4	318	8.9	9.4	C
7266.0	7.4	18	3.4	319	8.8	9.4	C
7268.0	5.7	303	3.4	319	8.8	9.4	A
7270.0	8.8	286	3.4	319	8.9	9.5	A
7272.0	9.3	287	3.4	319	8.9	9.6	A
7274.0	7.0	278	3.4	319	8.7	9.4	C
7276.0	6.3	261	3.4	320	8.6	9.2	B
7278.0			3.4	319	8.5	9.2	
7280.0			3.4	317	8.6	9.4	
7282.0	3.7	258	3.4	318	8.8	9.6	B
7284.0	3.7	257	3.4	318	8.7	9.3	B
7286.0	4.1	268	3.4	319	8.5	9.0	D
7288.0	1.8	308	3.4	319	8.5	8.8	D
7290.0			3.4	317	8.5	8.7	
7292.0			3.4	316	8.5	8.8	
7294.0			3.3	316	8.5	8.8	
7296.0	3.0	39	3.3	317	8.5	8.9	D
7298.0	6.1	327	3.3	317	8.6	9.2	D
7300.0	3.0	159	3.3	317	8.8	9.5	B
7302.0	2.7	159	3.3	317	8.8	9.6	B
7304.0	0.4	345	3.2	318	8.7	9.5	D
7306.0	1.0	161	3.3	319	8.6	9.3	D
7308.0			3.3	320	8.6	9.1	
7310.0	16.3	352	3.3	323	8.6	9.0	D
7312.0	16.6	354	3.3	325	8.6	9.1	D
7314.0	14.2	359	3.3	329	8.6	9.3	D
7316.0			3.3	333	8.7	9.4	
7318.0			3.3	334	8.8	9.6	
7320.0			3.3	334	8.9	9.7	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7322.0	8.0	60	3.2	332	8.9	9.8	A
7324.0	9.9	51	3.2	332	9.0	10.0	A
7326.0	7.4	18	3.2	331	9.0	10.0	C
7328.0	16.0	46	3.2	329	8.9	9.9	C
7330.0	13.0	14	3.2	328	8.9	9.9	A
7332.0	6.7	18	3.2	328	9.0	9.9	C
7334.0	1.6	3	3.2	328	9.0	10.0	A
7336.0	4.4	241	3.2	328	9.0	10.1	A
7338.0	5.3	277	3.2	328	8.9	10.0	C
7340.0	2.4	262	3.2	328	8.9	9.8	A
7342.0	2.4	260	3.2	328	9.0	9.9	A
7344.0	4.7	265	3.2	328	9.0	9.8	D
7346.0	5.6	230	3.2	326	8.9	9.8	B
7348.0	5.6	228	3.2	326	9.0	9.9	B
7350.0	5.2	241	3.2	325	8.9	9.9	D
7352.0	3.2	218	3.1	325	8.9	9.9	D
7354.0			3.1	325	8.8	9.9	
7356.0			3.1	325	8.7	9.7	
7358.0			3.1	324	8.6	9.3	
7360.0	7.4	194	3.1	324	8.6	9.1	D
7362.0			3.1	323	8.6	9.1	
7364.0			3.1	323	8.6	9.1	
7366.0			3.1	323	8.6	9.1	
7368.0			3.1	324	8.6	9.2	
7370.0			3.1	326	8.6	9.3	
7372.0			3.1	327	8.5	9.4	
7374.0			3.1	325	8.5	9.5	
7376.0			3.1	324	8.6	9.5	
7378.0			3.1	324	8.7	9.4	
7380.0			3.1	324	8.8	9.5	
7382.0			3.1	324	8.9	9.7	
7384.0			3.1	324	9.0	9.9	
7386.0			3.1	325	9.0	10.0	
7388.0			3.1	324	9.0	9.8	
7390.0			3.1	323	8.9	9.7	
7392.0	1.4	281	3.2	323	9.0	9.8	D
7394.0	7.0	285	3.2	323	9.0	9.8	D
7396.0			3.1	323	9.1	9.9	
7398.0	4.0	263	3.1	323	9.2	10.1	B
7400.0	3.8	273	3.1	323	9.2	10.0	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7402.0	2.7	305	3.1	324	9.1	9.8	B
7404.0	1.5	337	3.1	324	9.1	9.9	D
7406.0			3.1	324	9.3	10.1	
7408.0	3.6	166	3.0	324	9.3	10.2	B
7410.0	5.9	119	3.0	324	9.1	9.9	B
7412.0	8.2	144	3.0	324	8.9	9.6	B
7414.0			3.0	324	9.0	9.6	
7416.0	4.6	135	3.0	323	9.1	9.7	D
7418.0	14.6	306	3.0	323	9.1	9.8	D
7420.0	6.8	184	3.0	323	9.0	9.7	D
7422.0	1.8	297	3.0	324	9.1	9.7	D
7424.0	6.2	174	3.0	323	9.1	9.7	C
7426.0	5.5	202	3.0	323	9.1	9.7	A
7428.0	2.7	258	3.0	323	9.1	9.9	A
7430.0	5.6	324	3.0	323	9.1	9.8	A
7432.0			3.0	323	9.0	9.7	
7434.0	4.7	200	3.0	324	8.9	9.6	C
7436.0	5.8	66	3.0	324	9.0	9.7	A
7438.0	2.9	301	3.0	323	9.2	9.8	C
7440.0	7.9	73	2.9	323	9.1	9.8	C
7442.0	6.8	341	3.0	323	9.1	9.7	A
7444.0	9.5	110	3.0	323	9.0	9.6	A
7446.0	8.1	108	3.0	323	9.1	9.7	A
7448.0	4.5	184	3.0	323	9.1	9.7	A
7450.0	4.6	181	3.0	322	9.0	9.7	A
7452.0	3.7	178	3.0	322	9.0	9.7	A
7454.0	15.5	186	2.9	322	9.0	9.6	B
7456.0	10.2	130	3.0	322	8.9	9.4	C
7458.0	7.9	119	2.9	322	9.0	9.5	A
7460.0	9.1	103	2.9	322	9.1	9.8	A
7462.0	3.6	69	2.9	322	9.2	9.9	A
7464.0	3.3	48	2.9	322	9.2	9.9	A
7466.0	16.0	348	2.9	322	8.9	9.5	B
7468.0	11.1	350	2.9	322	8.8	9.3	A
7470.0	12.3	351	2.9	322	8.9	9.4	C
7472.0	1.1	287	2.9	322	8.8	9.4	A
7474.0	1.4	133	2.9	322	8.8	9.4	A
7476.0	9.4	180	2.9	322	8.7	9.3	C
7478.0			2.9	322	8.8	9.2	
7480.0	1.6	142	2.9	322	8.8	9.4	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7482.0	2.4	195	2.9	323	8.8	9.5	C
7484.0			2.9	322	8.9	9.7	
7486.0			2.9	322	9.1	9.7	
7488.0	7.6	4	2.9	322	9.1	9.7	B
7490.0	7.9	31	2.9	321	9.1	9.8	D
7492.0	12.4	17	2.9	320	9.1	9.8	D
7494.0	9.5	25	2.9	320	9.0	9.7	D
7496.0			2.9	320	9.0	9.6	
7498.0			2.9	320	9.0	9.6	
7500.0			2.8	319	9.0	9.6	
7502.0	4.4	30	2.8	318	9.0	9.6	D
7504.0	9.8	172	2.8	317	8.9	9.5	D
7506.0			2.8	317	8.9	9.4	
7508.0	6.7	180	2.9	317	8.9	9.5	D
7510.0	5.5	175	2.9	317	9.0	9.5	D
7512.0	3.9	166	2.8	317	8.9	9.4	D
7514.0	4.0	164	2.8	316	8.9	9.2	B
7516.0	4.2	194	2.8	317	9.0	9.3	D
7518.0	6.3	32	2.8	317	8.9	9.3	B
7520.0	5.4	202	2.8	318	8.8	9.2	D
7522.0			2.8	320	8.6	9.2	
7524.0	3.7	106	2.7	321	8.7	9.3	A
7526.0	2.4	140	2.7	323	8.8	9.4	A
7528.0	3.9	141	2.7	324	8.7	9.4	A
7530.0	3.5	60	2.7	325	8.6	9.2	C
7532.0	12.4	127	2.8	327	8.6	9.2	C
7534.0	9.4	144	2.8	327	8.6	9.1	C
7536.0			2.8	328	8.8	9.1	
7538.0	1.9	125	2.8	329	9.0	9.6	A
7540.0	1.9	133	2.8	329	8.8	9.5	A
7542.0	6.8	129	2.8	328	8.5	9.0	A
7544.0	4.2	178	2.8	327	8.4	8.9	A
7546.0			2.8	326	8.4	8.8	
7549.0	7.3	212	2.8	325	8.5	8.9	A
7550.0	4.7	222	2.7	324	8.6	9.0	A
7552.0	1.0	170	2.7	324	8.7	9.1	A
7554.0	1.3	148	2.7	323	8.9	9.5	A
7556.0	1.6	294	2.7	323	9.1	9.9	A
7558.0	5.0	227	2.7	323	9.1	9.9	A
7560.0	4.8	292	2.7	322	9.0	9.8	C

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7562.0	10.5	317	2.7	321	9.1	9.8	C
7564.0	1.8	131	2.7	321	9.0	9.9	A
7566.0	2.4	114	2.7	320	8.9	9.7	A
7568.0	3.5	185	2.8	321	9.0	9.5	A
7570.0	3.0	169	2.8	323	9.2	10.1	C
7572.0			2.8	323	9.3	10.3	
7574.0	13.4	289	2.8	322	9.2	10.1	D
7576.0	10.3	253	2.7	322	9.3	10.3	D
7578.0	10.6	273	2.7	321	9.5	10.3	B
7580.0	10.2	269	2.7	321	9.7	10.4	B
7582.0	9.5	266	2.6	321	9.7	10.4	D
7584.0	10.4	251	2.6	321	9.7	10.6	D
7586.0			2.6	321	9.6	10.8	
7588.0			2.6	321	9.2	10.5	
7590.0			2.6	321	9.0	10.1	
7592.0			2.7	321	9.1	10.0	
7594.0			2.7	321	9.1	9.9	
7596.0			2.8	323	9.2	10.2	
7598.0			2.8	323	9.3	10.7	
7600.0			2.7	321	9.0	10.1	
7602.0			2.6	321	8.5	9.1	
7604.0			2.6	320	8.5	8.9	
7606.0			2.6	320	8.5	8.9	
7608.0			2.6	321	8.5	8.9	
7610.0			2.6	322	8.5	9.0	
7612.0			2.5	322	8.7	9.1	
7614.0			2.5	323	9.0	9.5	
7616.0			2.5	324	9.1	9.8	
7618.0	2.5	122	2.5	324	9.1	10.0	D
7620.0	5.3	280	2.4	325	9.2	10.0	D
7622.0	4.5	295	2.4	325	9.1	9.9	D
7624.0	12.3	232	2.4	324	9.1	9.8	D
7626.0	6.2	253	2.4	324	9.3	10.1	B
7628.0	5.9	251	2.4	325	9.6	10.4	B
7630.0	10.0	183	2.4	325	9.2	9.9	D
7632.0	6.7	234	2.4	325	8.6	9.1	D
7634.0			2.5	325	8.4	8.8	
7636.0			2.4	325	8.4	8.7	
7638.0			2.4	325	8.5	8.8	
7640.0	4.4	252	2.4	324	8.8	9.1	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7642.0	3.4	217	2.4	325	9.3	9.7	D
7644.0	3.3	239	2.4	326	9.3	9.7	D
7646.0	3.1	234	2.4	325	9.1	9.6	D
7648.0			2.3	325	9.2	9.7	
7650.0			2.3	326	9.5	9.9	
7652.0	2.1	213	2.3	326	10.2	10.2	D
7654.0			2.3	328	10.8	10.7	
7656.0			2.3	328	10.5	10.8	
7658.0			2.3	327	10.4	10.9	
7660.0			2.3	326	10.2	11.1	
7662.0			2.3	325	10.1	11.4	
7664.0			2.3	325	10.0	11.1	
7666.0			2.3	327	9.3	10.0	
7668.0			2.4	328	9.0	9.5	
7670.0			2.4	329	9.3	9.7	
7672.0			2.4	329	9.4	10.1	
7674.0			2.6	329	9.2	10.2	
7676.0			2.6	328	9.4	10.3	
7678.0	5.0	305	2.4	328	9.7	10.3	D
7680.0	11.2	266	2.3	329	9.0	9.5	D
7682.0	9.6	247	2.3	328	8.4	8.8	D
7684.0	25.8	64	2.3	328	8.4	8.7	D
7686.0	7.9	278	2.2	329	8.5	8.9	B
7688.0			2.3	328	8.8	9.3	
7690.0	21.9	49	2.3	327	8.9	9.6	B
7692.0	21.2	50	2.3	327	8.9	9.7	D
7694.0			2.3	328	8.7	9.5	
7696.0			2.2	327	8.5	9.1	
7698.0	6.0	251	2.2	325	8.4	8.8	D
7700.0	4.3	196	2.2	325	8.5	8.8	D
7702.0	3.9	203	2.2	324	8.5	8.8	D
7704.0			2.2	324	8.5	8.9	
7706.0	8.7	242	2.2	324	8.6	9.0	D
7708.0			2.2	326	8.8	9.3	
7710.0			2.2	328	9.5	9.9	
7712.0			2.2	327	10.2	10.2	
7714.0			2.1	328	10.6	10.4	
7716.0	9.2	199	2.1	330	10.8	10.5	D
7718.0	18.1	138	2.2	330	10.7	10.8	B
7720.0	21.2	140	2.2	330	10.5	10.9	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7722.0	3.1	286	2.1	331	10.0	10.4	D
7724.0	2.7	291	2.1	331	9.7	10.1	D
7726.0	4.8	338	2.1	331	9.6	10.1	D
7728.0	14.7	336	2.1	331	9.8	10.3	B
7730.0	12.2	335	2.1	331	10.5	10.8	B
7732.0	9.0	291	2.1	330	10.5	10.8	D
7734.0			2.1	329	9.8	10.2	
7736.0	10.5	354	2.1	330	9.2	9.8	D
7738.0			2.0	328	8.9	9.5	
7740.0	1.7	326	2.0	326	8.7	9.2	C
7742.0	6.7	179	2.0	326	8.8	9.1	A
7744.0	5.7	189	2.0	328	8.9	9.1	A
7746.0	6.7	309	2.0	330	9.0	9.3	C
7748.0	3.4	84	2.0	330	8.9	9.4	A
7750.0	4.5	86	2.1	329	8.8	9.4	A
7752.0	4.2	18	2.1	329	8.8	9.4	A
7754.0	2.7	99	2.1	328	8.6	9.3	A
7756.0	7.3	130	2.1	328	8.6	9.3	A
7758.0			2.1	327	8.6	9.4	
7760.0	14.8	51	2.1	327	8.6	9.5	D
7762.0			2.1	327	8.8	9.6	
7764.0	8.5	52	2.1	326	9.3	9.9	D
7766.0	8.8	51	2.0	326	9.5	10.3	D
7768.0	12.6	51	2.0	326	9.4	10.3	B
7770.0	13.4	36	2.1	327	9.3	10.3	B
7772.0	10.4	44	2.1	328	9.0	9.9	B
7774.0			2.0	328	8.6	9.3	
7776.0			2.0	329	8.6	9.2	
7778.0			2.0	329	8.5	9.2	
7780.0	7.5	280	2.0	330	8.5	9.3	C
7782.0	7.8	285	2.0	330	8.5	9.2	C
7784.0	4.7	260	1.9	330	8.7	9.5	A
7786.0	13.6	229	1.9	331	9.9	9.9	C
7788.0	11.3	225	1.9	330	9.4	10.0	A
7790.0	13.6	214	1.8	330	10.0	10.3	C
7792.0	9.7	218	1.8	330	10.3	10.5	A
7794.0	5.5	211	1.7	330	10.5	10.7	A
7796.0	14.3	223	1.7	330	10.1	10.5	C
7798.0			1.8	331	9.5	10.2	
7800.0			1.8	332	9.3	9.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7802.0			1.8	332	9.3	9.8	
7804.0			1.8	332	9.3	9.8	
7806.0			1.8	332	9.1	9.7	
7808.0			1.8	332	8.8	9.5	
7810.0			1.8	331	8.8	9.5	
7812.0			1.8	332	9.0	9.7	
7814.0			1.8	331	9.2	9.9	
7816.0			1.8	330	9.4	10.1	
7818.0			1.8	329	9.0	9.7	
7820.0			1.8	330	8.7	9.3	
7822.0			1.8	332	8.7	9.4	
7824.0			1.8	333	8.7	9.2	
7826.0			1.7	333	8.6	8.7	
7828.0			1.7	332	8.6	8.7	
7830.0			1.7	333	8.8	8.9	
7832.0			1.7	335	9.2	9.5	
7834.0			1.7	335	9.5	10.0	
7836.0			1.6	334	9.2	9.7	
7838.0			1.6	333	8.7	9.0	
7840.0			1.6	333	8.6	8.8	
7842.0			1.6	333	8.6	8.8	
7844.0			1.6	333	8.6	8.8	
7846.0			1.6	334	8.7	9.2	
7848.0			1.6	332	8.8	9.3	
7850.0			1.6	329	8.9	9.2	
7852.0			1.6	330	9.1	9.3	
7854.0			1.6	332	9.7	9.7	
7856.0			1.6	331	10.0	9.9	
7858.0	10.1	236	1.6	332	10.0	9.9	C
7860.0	12.6	240	1.6	332	9.9	9.8	C
7862.0	2.5	314	1.6	333	9.8	9.6	A
7864.0	5.9	308	1.6	334	9.7	9.4	A
7866.0	5.8	249	1.6	335	9.5	9.2	A
7868.0	4.7	230	1.6	336	9.4	9.1	A
7870.0	4.7	281	1.6	337	9.7	9.3	A
7872.0			1.6	339	10.1	9.8	
7874.0			1.7	341	10.1	9.9	
7876.0			1.7	341	9.9	9.5	
7878.0	11.7	305	1.7	341	9.8	9.6	C
7880.0			1.7	339	9.8	9.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7882.0			1.7	338	9.7	10.0	
7884.0	9.1	3	1.7	337	9.3	9.4	C
7886.0	1.0	349	1.7	335	8.9	8.8	C
7888.0			1.6	335	8.9	8.8	
7890.0			1.6	336	8.9	8.9	
7892.0	8.3	302	1.6	337	9.1	9.2	A
7894.0	8.0	303	1.6	338	9.2	9.4	A
7896.0	12.0	339	1.6	336	9.2	9.4	C
7898.0	2.9	256	1.6	335	9.1	9.2	B
7900.0	2.3	260	1.6	334	8.8	8.9	B
7902.0			1.6	334	8.7	8.7	
7904.0	3.8	130	1.6	334	8.7	8.7	D
7906.0			1.6	335	8.7	8.7	
7908.0			1.6	334	8.7	8.7	
7910.0			1.6	333	8.7	8.9	
7912.0			1.6	333	8.7	8.9	
7914.0			1.6	333	8.7	9.0	
7916.0			1.6	334	8.9	9.1	
7918.0			1.7	335	8.8	9.1	
7920.0			1.7	335	8.7	9.1	
7922.0			1.7	335	8.7	9.1	
7924.0			1.7	334	8.8	9.2	
7926.0			1.8	332	9.0	9.5	
7928.0			1.8	331	9.1	9.5	
7930.0			1.8	331	8.9	9.1	
7932.0			1.8	330	8.8	8.9	
7934.0	13.2	207	1.8	330	8.8	8.9	B
7936.0	14.1	209	1.8	332	8.8	8.7	B
7938.0			1.7	334	8.8	8.7	
7940.0			1.7	334	8.7	8.7	
7942.0			1.7	335	8.7	8.7	
7944.0			1.7	334	8.8	8.7	
7946.0			1.7	333	8.9	8.8	
7948.0	4.5	150	1.7	332	9.0	8.9	D
7950.0	4.2	150	1.7	330	9.1	9.0	D
7952.0			1.7	329	9.2	9.3	
7954.0	11.5	243	1.7	328	9.3	9.4	D
7956.0	5.4	277	1.7	328	9.2	9.2	B
7958.0	8.8	246	1.7	328	9.2	9.3	D
7960.0	7.3	230	1.7	327	9.2	9.5	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7962.0	3.2	243	1.7	327	9.1	9.4	D
7964.0			1.7	327	9.1	9.1	
7966.0			1.7	325	9.3	8.9	
7968.0	7.9	245	1.6	322	9.3	8.9	D
7970.0	3.2	199	1.7	321	9.5	9.1	D
7972.0	7.8	248	1.7	323	9.5	9.2	B
7974.0	5.5	263	1.6	325	9.3	9.1	B
7976.0			1.6	328	9.2	9.0	
7978.0			1.6	329	9.0	8.8	
7980.0			1.6	327	8.9	8.7	
7982.0			1.6	326	9.0	8.7	
7984.0			1.6	325	9.0	8.7	
7986.0			1.6	323	8.8	8.7	
7988.0	7.0	163	1.6	324	8.7	8.7	D
7990.0	7.1	161	1.6	324	8.7	8.7	D
7992.0	14.4	183	1.6	323	8.8	8.7	D
7994.0	9.5	122	1.6	322	8.9	8.7	D
7996.0	10.7	166	1.6	321	8.9	8.7	D
7998.0	3.3	178	1.6	320	8.8	8.7	D
8000.0	5.8	199	1.6	321	8.7	8.7	D
8002.0			1.6	322	8.6	8.6	
8004.0	4.7	213	1.6	323	8.7	8.6	D
8006.0	20.0	230	1.6	325	8.7	8.6	D
8008.0			1.6	325	8.7	8.6	
8010.0	23.3	250	1.6	324	8.8	8.7	B
8012.0	22.8	249	1.6	324	8.9	8.7	B
8014.0	10.0	197	1.6	324	9.1	8.7	B
8016.0	8.3	193	1.6	323	9.1	8.8	B
8018.0	11.2	209	1.6	323	9.3	9.1	D
8020.0			1.5	322	9.6	9.4	
8022.0			1.5	322	9.8	9.4	
8024.0			1.5	322	9.8	9.4	
8026.0			1.5	320	9.6	9.2	
8028.0			1.5	319	9.2	8.9	
8030.0	17.2	223	1.5	319	8.9	8.8	D
8032.0			1.5	320	9.0	8.9	
8034.0			1.5	320	9.4	9.1	
8036.0			1.5	319	9.8	9.4	
8038.0	46.1	323	1.5	319	9.9	9.4	D
8040.0	46.2	320	1.5	319	9.8	9.4	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8042.0	2.9	355	1.5	319	9.7	9.3	D
8044.0			1.5	319	9.6	9.3	
8046.0	13.1	40	1.4	319	9.4	9.2	B
8048.0	15.0	43	1.4	319	9.2	9.0	D
8050.0	24.8	58	1.4	319	9.2	9.0	D
8052.0	3.6	244	1.3	319	9.3	9.0	B
8054.0	3.4	241	1.3	320	9.4	9.1	B
8056.0	30.7	70	1.3	319	9.5	9.2	D
8058.0			1.4	317	9.5	9.1	
8060.0	14.8	6	1.4	315	9.4	9.1	D
8062.0	14.5	3	1.4	314	9.6	9.2	B
8064.0	35.1	281	1.4	316	9.6	9.4	D
8066.0	52.1	227	1.4	318	9.3	9.4	D
8068.0	36.7	281	1.4	318	9.1	9.3	D
8070.0	20.8	156	1.4	319	9.1	9.2	B
8072.0			1.4	320	9.0	9.1	
8074.0	28.1	274	1.4	320	9.1	9.1	D
8076.0			1.4	321	9.1	9.2	
8078.0			1.4	323	9.0	9.3	
8080.0			1.4	323	9.0	9.4	
8082.0			1.3	322	9.1	9.3	
8084.0	10.3	323	1.3	320	9.1	9.1	C
8086.0	4.8	248	1.4	318	8.9	9.0	A
8088.0	3.8	221	1.4	316	8.8	9.0	A
8090.0	6.5	254	1.4	316	8.8	9.0	A
8092.0	6.2	254	1.4	316	8.9	9.1	A
8094.0	10.4	223	1.4	316	9.0	9.1	A
8096.0	6.3	241	1.3	316	9.1	9.1	A
8098.0	3.6	254	1.3	316	9.4	9.2	B
8100.0			1.3	315	9.5	9.3	
8102.0			1.3	317	9.5	9.3	
8104.0			1.3	319	9.4	9.3	
8106.0			1.2	320	9.3	9.2	
8108.0			1.2	320	9.2	9.1	
8110.0	2.0	18	1.3	319	9.3	9.2	D
8112.0			1.3	319	9.4	9.2	
8114.0			1.3	319	9.2	9.0	
8116.0	3.5	224	1.3	318	9.1	8.8	D
8118.0	10.1	246	1.3	316	9.0	8.8	D
8120.0			1.4	314	8.9	8.7	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8122.0	10.3	282	1.4	314	8.9	8.8	D
8124.0	0.8	233	1.4	315	9.0	9.0	D
8126.0	11.2	250	1.4	316	9.2	9.2	D
8128.0	2.7	304	1.4	316	9.3	9.4	D
8130.0	7.1	254	1.4	315	9.3	9.4	B
8132.0	7.2	254	1.4	316	9.3	9.3	B
8134.0			1.4	320	9.3	9.2	
8136.0	5.2	297	1.3	323	9.2	9.3	D
8138.0	20.1	313	1.3	322	9.1	9.3	D
8140.0	25.4	316	1.3	318	9.0	9.2	D
8142.0			1.2	310	9.0	9.1	
8144.0	22.9	289	1.2	310	8.9	9.0	D
8146.0			1.2	319	8.8	8.8	
8148.0			1.3	325	8.8	8.8	
8150.0	19.3	316	1.3	327	8.7	9.0	B
8152.0	19.5	313	1.4	327	8.7	9.2	D
8154.0			1.4	327	8.6	9.2	
8156.0			1.4	329	8.6	9.1	
8158.0			1.5	332	8.6	8.8	
8160.0			1.4	333	8.6	8.7	
8162.0			1.4	334	8.6	8.7	
8164.0			1.4	334	8.6	8.6	
8166.0			1.3	334	8.6	8.6	
8168.0			1.3	334	8.6	8.7	
8170.0	24.1	21	1.2	336	8.6	8.7	B
8172.0	24.4	23	1.2	337	8.6	8.7	D
8174.0			1.1	335	8.7	8.7	
8176.0			1.1	334	8.7	8.7	
8178.0			1.2	332	8.8	8.8	
8180.0			1.2	331	8.9	9.0	
8182.0			1.2	332	9.0	9.4	
8184.0			1.2	335	9.1	9.5	
8186.0			1.2	336	9.0	9.3	
8188.0			1.3	335	8.9	9.2	
8190.0			1.3	333	9.0	9.2	
8192.0			1.3	332	9.0	9.2	
8194.0			1.3	332	9.1	9.1	
8196.0			1.3	333	9.0	9.1	
8198.0	22.7	171	1.3	337	8.9	9.2	D
8200.0	24.7	169	1.3	336	8.9	9.2	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8202.0			1.3	334	9.0	9.2	
8204.0			1.3	333	9.1	9.2	
8206.0			1.3	331	9.0	9.2	
8208.0			1.3	331	8.9	9.1	
8210.0			1.4	330	8.7	9.2	
8212.0	5.5	8	1.4	327	8.7	9.2	D
8214.0	7.8	3	1.4	325	8.8	9.2	D
8216.0			1.4	325	8.7	9.2	
8218.0			1.4	324	8.7	9.1	
8220.0	44.7	202	1.4	325	8.7	9.1	D
8222.0			1.4	326	8.7	9.0	
8224.0			1.4	329	8.6	8.9	
8226.0			1.4	331	8.6	8.8	
8228.0	41.6	204	1.4	330	8.6	8.8	D
8230.0			1.4	327	8.7	8.9	
8232.0			1.4	325	8.8	9.0	
8234.0			1.4	322	8.8	9.1	
8236.0			1.4	319	8.8	9.2	
8238.0	16.8	229	1.4	318	8.8	9.3	D
8240.0			1.4	318	8.9	9.5	
8242.0			1.4	318	8.9	9.3	
8244.0	68.6	171	1.4	318	8.8	9.3	D
8246.0	24.2	241	1.4	319	8.8	9.3	D
8248.0	24.7	235	1.4	319	8.8	9.0	B
8250.0	25.2	249	1.3	318	8.8	8.8	D
8252.0	26.3	251	1.3	318	8.9	9.0	D
8254.0			1.3	320	8.9	9.2	
8256.0			1.3	322	8.9	9.2	
8258.0			1.3	323	9.1	9.3	
8260.0			1.3	323	9.2	9.4	
8262.0			1.3	322	9.3	9.6	
8264.0			1.3	321	9.3	9.7	
8266.0			1.3	322	9.4	9.8	
8268.0			1.3	322	9.5	9.9	
8270.0			1.3	321	9.3	9.6	
8272.0			1.3	323	9.1	9.4	
8274.0			1.3	323	9.2	9.5	
8276.0			1.3	320	9.0	9.4	
8278.0	8.3	231	1.2	318	8.8	9.2	B
8280.0			1.2	319	8.9	9.3	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8282.0			1.2	319	9.0	9.3	
8284.0	5.9	249	1.2	319	9.0	9.4	D
8286.0	10.3	246	1.2	320	9.1	9.6	D
8288.0	9.4	245	1.2	321	9.3	9.6	B
8290.0			1.2	321	9.3	9.6	
8292.0			1.2	321	9.2	9.7	
8294.0			1.2	322	9.1	9.7	
8296.0			1.2	321	9.2	9.7	
8298.0			1.2	320	9.2	9.7	
8300.0			1.2	321	9.2	9.8	
8302.0			1.2	320	9.0	9.5	
8304.0			1.2	318	8.8	9.2	
8306.0			1.2	316	8.8	9.1	
8308.0			1.2	315	8.8	9.2	
8310.0			1.2	315	8.9	9.3	
8312.0			1.2	318	8.9	9.3	
8314.0			1.2	319	8.8	8.9	
8316.0			1.3	321	8.8	8.7	
8318.0			1.3	323	8.9	8.8	
8320.0			1.3	323	8.9	8.8	
8322.0	6.6	125	1.3	325	8.8	9.0	D
8324.0	12.9	134	1.3	327	8.8	9.1	D
8326.0	11.9	137	1.3	328	8.8	9.1	D
8328.0	9.4	294	1.2	328	8.8	9.0	D
8330.0	5.9	117	1.2	324	8.7	8.8	B
8332.0	6.7	297	1.2	320	8.7	8.7	D
8334.0	9.2	139	1.2	318	8.7	8.8	D
8336.0	10.7	140	1.1	316	8.7	9.0	D
8338.0	5.2	28	1.1	317	8.7	9.3	D
8340.0	78.9	120	1.1	319	8.6	9.5	D
8342.0			1.1	318	8.7	9.5	
8344.0			1.1	316	8.7	9.5	
8346.0	9.7	253	1.1	317	8.7	9.4	D
8348.0			1.2	319	8.6	9.1	
8350.0	1.5	251	1.2	321	8.6	9.0	D
8352.0			1.2	320	8.6	9.0	
8354.0			1.1	319	8.6	9.1	
8356.0	1.3	157	1.1	317	8.6	9.2	D
8358.0			1.1	316	8.6	9.4	
8360.0	26.7	84	1.1	315	8.6	9.4	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8362.0	24.8	80	1.1	316	8.6	9.4	D
8364.0			1.1	315	8.7	9.5	
8366.0			1.1	310	8.7	9.7	
8368.0			1.1	307	8.7	9.6	
8370.0	6.9	199	1.1	307	8.7	9.2	D
8372.0			1.1	307	8.9	9.0	
8374.0	23.4	68	1.1	308	9.0	9.0	B
8376.0	23.7	66	1.1	309	8.9	9.0	D
8378.0			1.1	308	8.7	8.9	
8380.0			1.2	306	8.7	8.9	
8382.0			1.2	305	8.9	8.9	
8384.0			1.2	306	9.0	8.9	
8386.0			1.3	307	9.0	8.9	
8388.0			1.3	305	9.0	9.0	
8390.0			1.3	304	9.0	9.0	
8392.0			1.3	304	9.0	9.1	
8394.0			1.2	304	9.0	9.0	
8396.0			1.2	303	9.0	8.9	
8398.0			1.3	302	9.1	8.8	
8400.0			1.3	302	9.1	8.8	
8402.0			1.3	301	9.1	8.9	
8404.0			1.3	301	9.1	8.9	
8406.0			1.3	302	9.2	8.9	
8408.0			1.3	303	9.3	9.0	
8410.0			1.3	303	9.4	9.1	
8412.0			1.4	302	9.4	9.2	
8414.0			1.4	301	9.5	9.2	
8416.0			1.4	302	9.4	9.3	
8418.0			1.4	304	9.4	9.4	
8420.0			1.4	304	9.4	9.4	
8422.0			1.4	304	9.3	9.3	
8424.0			1.4	306	9.3	9.1	
8426.0			1.4	308	9.2	9.1	
8428.0			1.4	306	9.2	9.1	
8430.0	23.2	232	1.4	303	9.2	9.0	D
8432.0	23.0	230	1.5	301	9.2	9.0	D
8434.0	44.8	149	1.5	300	9.2	9.0	D
8436.0	44.8	149	1.5	299	9.3	9.0	D
8438.0			1.5	299	9.3	9.0	
8440.0			1.5	298	9.1	9.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8442.0			1.5	298	9.0	9.0	
8444.0			1.5	298	9.0	8.9	
8446.0			1.5	299	8.9	8.8	
8448.0			1.5	301	8.8	8.9	
8450.0			1.5	302	8.8	9.0	
8452.0			1.5	302	8.8	9.1	
8454.0			1.6	302	8.9	9.2	
8456.0			1.6	302	8.8	9.1	
8458.0	9.5	155	1.6	303	8.7	8.9	B
8460.0	8.5	156	1.6	304	8.7	8.8	B
8462.0			1.6	304	8.7	8.8	
8464.0	3.3	169	1.6	306	8.7	8.8	D
8466.0			1.7	306	8.7	8.8	
8468.0			1.7	307	8.6	8.8	
8470.0			1.7	307	8.6	8.8	
8472.0	5.1	180	1.7	307	8.6	8.8	D
8474.0			1.7	308	8.5	8.8	
8476.0	6.6	204	1.7	309	8.5	8.9	D
8478.0	8.7	257	1.7	310	8.5	9.0	C
8480.0	14.7	296	1.6	311	8.5	9.1	A
8482.0	10.1	299	1.6	313	8.5	9.1	A
8484.0	10.8	297	1.6	316	8.6	9.1	C
8486.0	9.9	268	1.6	319	8.6	9.1	C
8488.0	2.3	307	1.7	320	8.6	9.1	C
8490.0	14.0	273	1.7	321	9.6	9.2	A
8492.0	10.3	276	1.7	321	8.6	9.2	A
8494.0	9.0	270	1.8	323	8.5	9.3	A
8496.0	3.9	271	1.8	325	8.4	9.3	A
8498.0	7.5	279	1.9	326	8.4	9.4	D
8500.0	12.9	276	1.9	329	8.4	9.5	D
8502.0	22.9	235	1.9	333	8.4	9.6	D
8504.0			1.8	336	8.4	9.8	
8506.0	7.2	245	1.8	333	8.4	10.0	D
8508.0	8.7	230	1.8	330	8.4	10.4	B
8510.0			1.8	335	8.4	11.0	
8512.0			1.8	340	8.3	11.5	
8514.0			1.8	343	8.3	11.5	
8516.0	17.3	239	1.8	346	8.4	11.3	B
8518.0	6.5	252	1.8	348	8.3	11.1	A
8520.0	7.5	243	1.8	346	8.4	11.1	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8522.0	6.8	262	1.8	345	8.4	11.1	A
8524.0	5.1	243	1.8	346	8.5	11.0	A
8526.0	6.1	255	1.8	348	8.6	11.1	A
8528.0	5.0	261	1.8	348	8.6	11.3	A
8530.0	4.4	279	1.8	346	8.6	11.6	A
8532.0	4.2	205	1.8	346	8.7	11.7	A
8534.0	3.3	198	1.9	347	8.6	11.8	C
8536.0			1.9	349	8.5	11.7	
8538.0	6.4	270	1.9	352	8.4	11.7	D
8540.0	7.3	248	1.9	354	8.3	11.9	B
8542.0	6.5	231	1.9	354	8.2	12.3	D
8544.0			2.0	355	8.2	12.6	
8546.0	15.8	225	2.0	354	8.2	12.9	D
8548.0			2.0	352	8.2	12.9	
8550.0			2.0	351	8.4	12.6	
8552.0			2.0	350	8.6	12.4	
8554.0			2.0	353	8.6	12.3	
8556.0			2.0	354	8.7	12.0	
8558.0			2.0	352	8.9	11.5	
8560.0			2.0	353	9.0	11.3	
8562.0			2.0	355	8.9	10.8	
8564.0			2.0	357	8.9	10.8	
8566.0			2.0	1	8.9	10.9	
8568.0			1.9	1	9.0	10.9	
8570.0			1.9	2	9.0	11.1	
8572.0			1.9	3	9.0	10.9	
8574.0			2.0	3	9.0	10.5	
8576.0			2.0	3	9.1	10.5	
8578.0	9.5	341	1.9	3	9.1	10.5	D
8580.0			2.0	4	9.0	10.1	
8582.0	30.1	112	2.0	5	9.1	9.7	D
8584.0	30.3	114	1.9	4	9.3	9.9	D
8586.0			1.9	3	9.3	10.6	
8588.0			1.8	1	9.1	10.3	
8590.0			1.8	360	9.1	9.5	
8592.0			1.8	359	9.1	9.5	
8594.0	30.1	112	1.8	358	9.1	9.3	D
8596.0	5.9	308	1.8	359	9.2	9.2	D
8598.0	6.0	307	1.8	1	9.2	9.1	D
8600.0	10.3	321	1.8	1	9.2	9.0	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8602.0	9.5	309	1.8	1	9.1	9.0	B
8604.0	8.6	303	1.8	1	9.1	9.0	D
8606.0	44.7	161	1.8	0	9.3	9.1	D
8608.0			1.9	360	9.4	9.3	
8610.0			1.9	360	9.4	9.2	
8612.0			1.9	0	9.4	9.3	
8614.0			1.9	1	9.5	9.2	
8616.0			1.9	0	9.5	9.2	
8618.0			1.8	360	9.5	9.3	
8620.0			1.8	360	9.6	9.3	
8622.0			1.8	0	9.6	9.5	
8624.0			1.8	360	9.7	9.6	
8626.0			1.8	359	9.8	9.6	
8628.0			1.8	359	9.8	9.5	
8630.0			1.8	359	9.7	9.5	
8632.0			1.7	359	9.7	9.6	
8634.0			1.7	358	9.7	9.4	
8636.0			1.7	357	9.7	9.1	
8638.0			1.7	358	9.7	9.0	
8640.0			1.7	0	9.7	9.0	
8642.0			1.6	1	9.7	9.0	
8644.0	2.8	76	1.6	0	9.6	9.0	D
8646.0	5.8	272	1.6	0	9.5	9.1	D
8648.0	5.7	267	1.6	359	9.6	9.4	D
8650.0			1.7	359	9.6	9.3	
8652.0			1.6	1	9.5	9.0	
8654.0			1.6	360	9.4	8.8	
8656.0			1.6	359	9.3	8.8	
8658.0			1.6	359	9.3	8.8	
8660.0			1.6	358	9.3	8.9	
8662.0			1.6	360	9.4	8.9	
8664.0			1.6	1	9.5	9.0	
8666.0	5.1	258	1.6	2	9.6	9.1	D
8668.0	2.3	291	1.6	2	9.6	9.1	B
8670.0	2.0	354	1.5	2	9.5	9.1	D
8672.0			1.5	3	9.5	9.2	
8674.0			1.5	5	9.6	9.3	
8676.0			1.5	6	9.7	9.4	
8678.0			1.4	7	9.7	9.4	
8680.0			1.4	9	9.8	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8682.0			1.4	10	9.8	9.3	
8684.0			1.4	8	9.7	9.3	
8686.0			1.4	8	9.6	9.3	
8688.0			1.4	10	9.4	9.2	
8690.0			1.4	8	9.3	9.2	
8692.0			1.4	6	9.5	9.2	
8694.0			1.4	7	9.8	9.5	
8696.0			1.4	8	10.2	9.8	
8698.0			1.3	9	10.4	10.0	
8700.0			1.3	8	10.5	10.1	
8702.0			1.3	7	10.6	10.2	
8704.0			1.3	7	10.6	10.2	
8706.0			1.3	8	10.6	10.2	
8708.0			1.3	6	10.7	10.2	
8710.0			1.3	4	10.6	10.2	
8712.0			1.3	4	10.5	10.2	
8714.0			1.3	4	10.2	10.2	
8716.0			1.3	4	10.1	10.2	
8718.0			1.3	5	10.2	10.3	
8720.0			1.3	5	10.3	10.4	
8722.0			1.3	4	10.4	10.4	
8724.0			1.3	4	10.4	10.4	
8726.0			1.3	3	10.3	10.4	
8728.0			1.3	5	10.3	10.4	
8730.0			1.3	6	10.3	10.4	
8732.0			1.2	8	10.2	10.4	
8734.0			1.2	8	10.1	10.2	
8736.0			1.2	8	9.9	10.0	
8738.0			1.2	8	9.9	10.0	
8740.0	27.1	331	1.2	7	10.0	10.2	D
8742.0			1.2	7	9.9	10.2	
8744.0			1.2	7	10.0	10.2	
8746.0	49.7	343	1.2	8	10.2	10.3	D
8748.0	50.5	344	1.2	9	10.2	10.3	B
8750.0			1.2	10	10.2	10.2	
8752.0			1.2	11	10.2	10.2	
8754.0			1.2	10	10.2	10.2	
8756.0			1.2	10	10.2	10.2	
8758.0			1.2	10	10.2	10.1	
8760.0			1.2	10	10.2	10.1	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8762.0			1.2	9	10.2	10.1	
8764.0	31.4	114	1.2	9	10.2	10.0	D
8766.0	30.8	113	1.2	10	10.4	10.0	D
8768.0			1.1	11	10.6	10.1	
8770.0			1.1	10	10.5	10.2	
8772.0			1.1	10	10.4	10.2	
8774.0			1.1	10	10.3	10.3	
8776.0			1.1	8	10.3	10.3	
8778.0			1.1	7	10.3	10.3	
8780.0			1.1	6	10.3	10.3	
8782.0			1.1	5	10.4	10.2	
8784.0			1.1	3	10.5	10.1	
8786.0	24.9	269	1.1	359	10.6	10.1	D
8788.0	24.9	268	1.2	359	10.6	10.0	D
8790.0			1.2	1	10.7	9.9	
8792.0			1.2	1	10.8	9.9	
8794.0	57.4	215	1.2	1	11.0	9.9	D
8796.0	57.7	216	1.3	1	11.0	9.8	D
8798.0	5.1	297	1.3	359	11.0	9.6	B
8800.0	5.2	299	1.3	359	10.8	9.4	B
8802.0			1.3	359	10.8	9.3	
8804.0			1.3	356	10.7	9.3	
8806.0			1.3	351	10.6	9.3	
8808.0			1.3	351	10.7	9.4	
8810.0			1.3	351	10.7	9.5	
8812.0	9.9	253	1.3	352	10.6	9.4	D
8814.0			1.3	353	10.5	9.4	
8816.0			1.4	352	10.6	9.4	
8818.0	18.8	181	1.4	349	10.6	9.3	B
8820.0			1.4	346	10.6	9.1	
8822.0			1.4	346	10.5	9.0	
8824.0			1.4	346	10.5	9.1	
8826.0	28.6	237	1.4	343	10.6	9.1	D
8828.0			1.4	342	10.6	9.2	
8830.0	16.9	279	1.4	343	10.6	9.3	B
8832.0	17.7	168	1.5	343	10.6	9.4	D
8834.0	18.0	173	1.5	342	10.9	9.6	D
8836.0	29.2	236	1.5	343	11.1	9.7	D
8838.0			1.5	341	11.0	9.7	
8840.0			1.5	340	10.9	9.6	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8842.0	3.3	176	1.5	341	11.0	9.7	D
8844.0	2.7	188	1.5	341	11.0	9.9	D
8846.0	6.4	247	1.5	339	10.9	10.0	B
8848.0			1.5	339	10.9	10.1	
8850.0			1.5	340	10.9	10.1	
8852.0	7.3	262	1.5	338	10.8	10.2	B
8854.0	6.0	277	1.5	336	10.8	10.3	D
8856.0			1.5	337	10.8	10.4	
8858.0			1.5	337	10.7	10.5	
8860.0	5.1	240	1.5	335	10.7	10.5	B
8862.0	5.3	196	1.5	334	10.6	10.4	B
8864.0	5.4	196	1.5	334	10.6	10.4	B
8866.0	5.9	170	1.6	333	10.7	10.4	D
8868.0			1.6	332	10.8	10.4	
8870.0			1.6	332	10.7	10.3	
8872.0			1.6	332	10.5	10.3	
8874.0			1.6	331	10.4	10.3	
8876.0			1.6	331	10.4	10.3	
8878.0			1.6	334	10.4	10.3	
8880.0	5.7	177	1.6	335	10.4	10.3	D
8882.0			1.6	335	10.4	10.3	
8884.0			1.6	335	10.4	10.3	
8886.0			1.6	334	10.3	10.3	
8888.0			1.6	334	10.3	10.3	
8890.0	7.3	259	1.6	333	10.3	10.3	D
8892.0			1.6	333	10.3	10.3	
8894.0			1.5	332	10.3	10.3	
8896.0	4.3	206	1.6	333	10.3	10.3	B
8898.0			1.6	333	10.3	10.4	
8900.0			1.6	333	10.3	10.4	
8902.0			1.7	333	10.3	10.4	
8904.0			1.7	333	10.3	10.4	
8906.0			1.7	334	10.3	10.4	
8908.0			1.7	333	10.2	10.4	
8910.0			1.7	335	10.2	10.4	
8912.0			1.7	336	10.1	10.4	
8914.0			1.6	335	10.0	10.3	
8916.0			1.6	334	10.0	10.3	
8918.0			1.7	334	9.9	10.3	
8920.0			1.7	334	9.9	10.2	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8922.0			1.7	334	9.8	10.2	
8924.0			1.7	334	9.8	10.2	
8926.0			1.7	333	9.8	10.2	
8928.0			1.8	333	9.8	10.1	
8930.0	9.8	151	1.8	332	9.8	10.1	B
8932.0	6.9	180	1.8	332	9.7	10.1	D
8934.0	6.6	215	1.7	333	9.7	10.0	B
8936.0	6.4	209	1.7	333	9.7	10.1	B
8938.0	4.9	252	1.7	332	9.6	10.1	A
8940.0	5.1	250	1.7	332	9.6	10.1	A
8942.0	4.5	228	1.8	332	9.5	10.0	A
8944.0	5.7	242	1.8	331	9.4	9.8	C
8946.0			1.8	330	9.3	9.7	
8948.0			1.8	330	9.3	9.8	
8950.0			1.8	330	9.4	9.9	
8952.0			1.8	330	9.4	10.0	
8954.0			1.8	330	9.4	10.1	
8956.0			1.8	329	9.5	10.1	
8958.0			1.8	329	9.4	10.1	
8960.0			1.8	331	9.4	10.0	
8962.0			1.8	333	9.4	10.1	
8964.0			1.8	334	9.5	10.3	
8966.0	9.5	310	1.8	334	9.5	10.5	D
8968.0			1.8	334	9.6	10.8	
8970.0			1.8	335	9.6	10.9	
8972.0	10.1	331	1.8	334	9.5	10.5	D
8974.0	8.0	200	1.8	334	9.5	10.1	C
8976.0	2.6	141	1.8	334	9.5	10.1	A
8978.0	3.5	174	1.8	334	9.5	10.1	A
8980.0	5.4	168	1.8	334	9.5	10.2	A
8982.0	1.9	159	1.8	333	9.6	10.2	A
8984.0	5.7	182	1.8	332	9.5	10.2	A
8986.0	9.6	288	1.8	331	9.5	10.2	C
8988.0	5.1	252	1.8	332	9.6	10.3	A
8990.0	6.6	244	1.8	333	9.7	10.5	A
8992.0			1.8	334	9.8	10.7	
8994.0	3.5	256	1.8	334	9.9	11.1	B
8996.0	4.0	228	1.8	335	10.0	11.4	B
8998.0	1.7	337	1.8	335	10.1	11.5	B
9000.0	2.5	253	1.8	335	10.0	11.6	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9002.0	3.5	162	1.8	337	10.0	11.8	D
9004.0	6.7	49	1.8	338	10.1	11.7	D
9006.0	6.6	200	1.8	339	10.0	11.4	D
9008.0	14.8	175	1.7	339	10.3	11.7	B
9010.0	15.9	181	1.7	337	10.2	11.7	B
9012.0	19.2	166	1.7	336	10.0	11.4	B
9014.0			1.8	337	10.1	11.5	
9016.0			1.8	338	10.2	11.7	
9018.0			1.8	338	10.4	12.0	
9020.0			1.8	338	10.9	12.2	
9022.0			1.9	340	12.0	12.3	
9024.0			1.9	340	13.0	12.4	
9026.0			1.9	341	13.1	12.5	
9028.0			1.9	344	12.7	12.4	
9030.0			1.9	345	12.4	12.5	
9032.0			1.9	346	12.2	12.7	
9034.0			2.0	347	11.7	13.1	
9036.0			2.0	348	11.0	13.5	
9038.0			2.0	348	10.5	13.8	
9040.0			2.0	349	10.4	13.9	
9042.0			2.1	349	10.6	14.2	
9044.0			2.1	347	11.0	14.6	
9046.0			2.1	346	11.3	15.0	
9048.0			2.1	346	11.4	15.5	
9050.0			2.1	347	11.5	15.5	
9052.0			2.1	347	11.5	15.4	
9054.0	40.9	312	2.1	347	11.2	15.2	D
9056.0	41.2	313	2.1	348	11.0	15.0	D
9058.0	27.6	250	2.1	347	10.7	14.8	D
9060.0	40.9	316	2.0	347	10.6	14.7	D
9062.0	30.9	251	2.0	349	10.3	14.5	D
9064.0			2.0	351	10.1	14.3	
9066.0	37.0	312	2.1	354	9.7	13.7	D
9068.0	36.3	306	2.1	354	9.6	13.7	D
9070.0			2.0	353	10.7	13.5	
9072.0	42.1	315	2.1	353	11.7	12.8	D
9074.0			2.1	352	12.2	12.3	
9076.0			2.1	352	12.6	11.8	
9078.0			2.2	352	13.2	11.7	
9080.0			2.2	353	13.5	11.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9082.0			2.3	353	13.5	11.5	
9084.0			2.3	354	13.4	11.1	
9086.0			2.4	355	13.4	10.6	
9088.0			2.5	356	13.4	10.3	
9090.0			2.5	357	13.2	10.1	
9092.0			2.5	357	12.9	10.1	
9094.0			2.5	356	12.6	10.2	
9096.0	4.1	12	2.6	357	12.4	10.2	B
9098.0	7.6	347	2.6	357	12.1	9.8	B
9100.0			2.7	357	11.8	9.5	
9102.0			2.7	357	11.4	9.2	
9104.0	12.2	156	2.7	357	10.7	8.9	D
9106.0	12.6	157	2.8	358	10.0	8.7	D
9108.0			2.8	359	9.7	8.7	
9110.0			2.8	359	9.5	9.0	
9112.0			2.8	357	9.5	9.1	
9114.0			2.8	357	9.7	9.1	
9116.0			2.8	358	9.9	9.0	
9118.0			2.8	1	9.9	9.0	
9120.0			2.8	2	9.8	9.1	
9122.0			2.7	1	9.6	9.2	
9124.0			2.7	2	9.5	9.1	
9126.0			2.7	3	9.5	9.0	
9128.0			2.6	4	9.5	9.1	
9130.0			2.6	3	9.4	9.1	
9132.0			2.6	3	9.3	9.1	
9134.0			2.6	2	9.4	9.3	
9136.0			2.6	1	9.4	9.3	
9138.0			2.6	1	9.4	9.3	
9140.0			2.6	2	9.4	9.4	
9142.0	7.9	296	2.6	3	9.4	9.5	D
9144.0	8.7	234	2.7	2	9.3	9.6	D
9146.0	8.5	233	2.7	2	9.3	9.7	D
9148.0	9.7	282	2.7	2	9.3	9.9	D
9150.0	9.6	280	2.7	2	9.4	9.9	D
9152.0	7.9	238	2.7	2	9.4	9.7	B
9154.0	7.8	239	2.7	3	9.3	9.8	B
9156.0	7.3	316	2.7	3	9.3	9.8	D
9158.0	14.7	350	2.7	3	9.4	9.9	D
9160.0			2.7	3	9.4	9.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9162.0			2.6	3	9.3	9.7	
9164.0	7.6	239	2.6	3	9.3	9.7	D
9166.0			2.6	2	9.3	9.7	
9168.0			2.6	2	9.3	9.7	
9170.0	5.4	254	2.6	3	9.2	9.6	D
9172.0	5.9	252	2.6	3	9.1	9.5	D
9174.0			2.6	3	9.1	9.5	
9176.0			2.6	2	9.1	9.6	
9178.0			2.6	2	9.2	9.7	
9180.0			2.5	2	9.3	9.9	
9182.0			2.5	0	9.3	9.9	
9184.0			2.6	358	9.3	9.9	
9186.0			2.6	0	9.4	9.9	
9188.0			2.6	359	9.4	9.9	
9190.0			2.6	360	9.4	9.9	
9192.0			2.6	0	9.4	10.0	
9194.0	5.6	36	2.6	356	9.3	9.9	C
9196.0	4.4	57	2.6	354	9.4	10.0	C
9198.0	7.5	222	2.5	356	9.4	10.4	A
9200.0	7.6	215	2.5	6	9.3	10.8	A
9202.0	7.8	232	2.5	10	9.3	11.0	A
9204.0	7.8	230	2.5	10	9.3	11.0	A
9206.0	12.6	198	2.5	9	9.4	11.4	C
9208.0			2.6	6	9.4	11.9	
9210.0			2.5	4	9.2	12.5	
9212.0			2.4	5	9.1	12.7	
9214.0			2.4	10	9.2	12.7	
9216.0			2.4	12	9.3	12.7	
9218.0			2.4	10	9.2	12.7	
9220.0			2.4	8	9.0	12.9	
9222.0			2.4	8	9.1	12.9	
9224.0			2.4	9	9.0	12.6	
9226.0			2.4	8	8.9	12.2	
9228.0			2.5	8	8.9	12.3	
9230.0			2.5	10	9.0	12.4	
9232.0			2.6	12	9.0	12.6	
9234.0			2.5	10	8.9	12.6	
9236.0			2.4	8	8.9	12.7	
9238.0			2.4	8	8.8	12.4	
9240.0			2.4	7	8.8	11.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9242.0			2.4	7	8.7	11.5	
9244.0			2.4	11	8.7	11.6	
9246.0			2.4	16	8.6	11.6	
9248.0			2.5	14	8.7	11.7	
9250.0			2.5	11	9.0	11.6	
9252.0	24.3	126	2.5	10	9.3	11.5	D
9254.0	24.1	122	2.6	10	9.4	11.7	D
9256.0	20.8	154	2.6	11	9.6	11.8	D
9258.0	21.3	147	2.6	10	9.7	12.2	D
9260.0			2.6	9	10.0	12.6	
9262.0			2.6	6	10.4	12.6	
9264.0	15.3	165	2.6	3	10.4	12.5	D
9266.0	16.9	124	2.6	5	10.9	12.3	D
9268.0	15.8	123	2.6	6	11.6	12.0	D
9270.0			2.5	5	11.6	11.7	
9272.0	24.3	121	2.4	5	11.4	11.7	D
9274.0	5.2	120	2.5	7	11.4	11.6	D
9276.0			2.6	7	10.4	10.2	
9278.0			2.7	8	9.1	8.8	
9280.0			2.7	8	8.9	8.7	
9282.0	3.4	339	2.7	9	9.0	8.8	D
9284.0			2.7	10	9.1	8.8	
9286.0	3.5	332	2.7	10	9.3	8.8	D
9288.0	5.1	259	2.7	11	9.4	8.8	B
9290.0	4.5	255	2.6	13	9.4	8.8	B
9292.0	6.2	66	2.6	12	9.5	8.9	D
9294.0	2.6	194	2.6	11	9.6	9.0	D
9296.0	2.4	286	2.6	12	9.7	9.0	B
9298.0	4.6	258	2.6	10	10.0	9.1	B
9300.0	5.9	237	2.6	9	10.8	9.2	D
9302.0	2.6	283	2.6	11	11.7	9.4	D
9304.0			2.7	13	11.9	9.4	
9306.0			2.7	13	12.1	9.2	
9308.0			2.8	14	12.6	9.4	
9310.0			2.8	13	13.3	9.8	
9312.0			2.7	12	13.9	9.7	
9314.0			2.6	12	14.1	9.6	
9316.0			2.5	13	13.9	9.9	
9318.0	21.3	162	2.5	14	13.8	10.5	D
9320.0			2.4	15	13.9	10.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9322.0			2.4	16	13.6	10.8	
9324.0			2.4	16	13.2	10.6	
9326.0	26.7	162	2.3	15	13.1	10.6	D
9328.0	25.6	170	2.3	13	12.9	10.5	D
9330.0	26.5	168	2.4	13	12.6	10.1	D
9332.0			2.4	13	12.4	9.7	
9334.0			2.4	12	12.0	9.7	
9336.0			2.5	9	11.8	10.1	
9338.0			2.5	7	11.9	10.0	
9340.0			2.5	8	11.5	9.5	
9342.0			2.5	9	11.2	9.6	
9344.0			2.6	9	11.4	9.8	
9346.0			2.6	8	12.2	9.7	
9348.0			2.5	8	12.6	9.6	
9350.0			2.5	10	11.9	9.5	
9352.0			2.5	10	11.1	9.5	
9354.0	12.3	210	2.4	10	10.7	9.5	D
9356.0			2.4	12	10.5	9.4	
9358.0	30.6	285	2.4	13	10.7	9.4	B
9360.0	11.6	255	2.4	13	11.1	9.4	D
9362.0			2.4	12	10.9	9.3	
9364.0			2.4	12	10.6	9.3	
9366.0			2.4	11	11.2	9.3	
9368.0	19.1	329	2.4	11	11.7	9.3	D
9370.0	6.2	209	2.4	11	11.3	9.3	D
9372.0	8.8	223	2.4	11	10.6	9.3	D
9374.0	6.2	5	2.4	10	10.0	9.3	D
9376.0	7.2	292	2.4	10	9.9	9.3	D
9378.0	6.7	275	2.4	11	9.9	9.3	B
9380.0	11.6	261	2.3	10	9.8	9.3	D
9382.0			2.3	10	9.7	9.4	
9384.0			2.4	12	9.6	9.4	
9386.0	4.3	274	2.4	13	9.5	9.4	B
9388.0	3.4	266	2.4	12	9.4	9.4	B
9390.0	3.3	237	2.4	10	9.3	9.4	D
9392.0			2.4	10	9.2	9.5	
9394.0	3.9	268	2.4	11	9.1	9.5	C
9396.0	4.6	283	2.4	10	8.9	9.4	A
9398.0			2.5	10	8.7	9.3	
9400.0			2.5	10	8.8	9.3	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9402.0	6.5	265	2.4	10	8.8	9.5	A
9404.0	6.6	281	2.4	10	9.0	9.7	A
9406.0	6.7	276	2.4	10	9.0	9.8	A
9408.0	8.1	258	2.4	11	8.8	9.7	A
9410.0	2.7	221	2.4	12	8.8	9.5	C
9412.0	2.8	262	2.4	12	9.0	9.6	A
9414.0	4.1	252	2.4	11	9.1	9.7	A
9416.0	4.5	249	2.4	12	9.1	9.7	A
9418.0	7.7	258	2.4	11	9.1	9.8	A
9420.0	8.2	256	2.4	11	9.1	9.8	A
9422.0	10.1	242	2.3	11	9.0	10.2	A
9424.0	9.4	247	2.3	11	9.0	10.7	A
9426.0	4.1	279	2.3	12	9.0	11.1	A
9428.0	6.2	297	2.3	12	8.9	11.1	A
9430.0	5.3	229	2.2	11	8.9	11.1	A
9432.0	12.6	238	2.2	10	9.0	11.3	C
9434.0			2.2	9	9.0	11.8	
9436.0			2.2	10	9.1	12.2	
9438.0			2.2	8	9.1	12.8	
9440.0			2.2	7	9.1	13.2	
9442.0			2.2	7	9.0	13.3	
9444.0			2.2	6	9.0	13.2	
9446.0			2.1	7	9.1	13.1	
9448.0			2.1	9	9.1	13.0	
9450.0			2.2	9	9.2	13.0	
9452.0			2.2	9	9.2	13.3	
9454.0			2.2	9	9.1	13.7	
9456.0	8.9	256	2.3	9	9.1	13.5	D
9458.0	10.3	275	2.3	7	9.1	13.4	D
9460.0	11.8	267	2.3	3	9.1	13.3	B
9462.0	12.3	261	2.3	3	9.1	13.0	B
9464.0			2.3	5	9.1	13.2	
9466.0			2.3	6	9.1	13.6	
9468.0			2.3	5	9.1	13.5	
9470.0			2.3	6	9.1	13.6	
9472.0			2.3	5	9.1	13.7	
9474.0			2.3	3	9.1	13.7	
9476.0			2.2	3	9.1	13.7	
9478.0	10.0	76	2.2	4	9.2	13.5	D
9480.0			2.2	6	9.1	13.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9482.0			2.2	4	9.1	13.4	
9484.0			2.2	3	9.0	13.3	
9486.0			2.2	2	9.0	13.3	
9488.0			2.1	3	9.0	13.3	
9490.0			2.1	3	9.0	13.4	
9492.0	2.4	110	2.2	3	9.0	13.5	B
9494.0	35.7	308	2.2	5	9.0	13.7	D
9496.0	34.6	306	2.2	5	9.1	13.7	D
9498.0			2.2	5	9.2	13.6	
9500.0			2.1	4	9.1	13.5	
9502.0	31.3	309	2.1	5	9.0	13.4	B
9504.0			2.1	5	9.1	13.1	
9506.0			2.1	5	9.0	12.2	
9508.0			2.2	8	8.9	11.7	
9510.0			2.2	10	9.0	11.8	
9512.0			2.2	6	9.1	12.2	
9514.0			2.1	3	9.1	12.3	
9516.0			2.1	4	9.0	11.9	
9518.0			2.1	5	8.9	11.7	
9520.0			2.1	6	8.8	11.2	
9522.0			2.1	6	8.6	10.0	
9524.0			2.1	7	8.6	9.7	
9526.0			2.1	9	8.7	10.2	
9528.0			2.0	8	8.8	10.6	
9530.0			2.0	7	9.0	11.1	
9532.0			1.9	10	9.1	11.6	
9534.0			1.9	12	9.1	12.1	
9536.0			1.8	12	9.1	12.5	
9538.0			1.8	13	9.2	12.6	
9540.0			1.8	15	9.2	12.4	
9542.0			1.8	17	9.3	12.2	
9544.0			1.8	15	9.3	12.1	
9546.0			1.8	15	9.3	11.9	
9548.0			1.8	15	9.4	11.7	
9550.0			1.8	14	9.4	11.4	
9552.0			1.8	13	9.3	11.3	
9554.0			1.7	11	9.2	11.3	
9556.0	33.9	331	1.7	10	9.2	11.4	D
9558.0			1.7	10	9.2	11.3	
9560.0			1.7	11	9.2	11.2	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9562.0	5.5	274	1.7	14	9.0	10.7	D
9564.0	8.6	292	1.6	13	8.9	10.1	D
9566.0	5.5	303	1.7	14	8.9	10.2	D
9568.0			1.7	13	9.0	10.5	
9570.0			1.7	14	9.0	10.7	
9572.0			1.8	14	8.9	10.7	
9574.0			1.8	14	8.9	10.8	
9576.0	12.5	235	1.8	13	9.0	10.9	D
9578.0			1.7	13	9.0	10.9	
9580.0			1.7	14	9.1	10.9	
9582.0			1.6	16	9.2	10.8	
9584.0			1.6	15	9.2	10.9	
9586.0	5.5	225	1.6	14	9.2	10.9	D
9588.0			1.6	15	9.1	11.0	
9590.0			1.6	17	9.1	11.0	
9592.0			1.5	19	9.1	10.9	
9594.0			1.5	18	9.0	10.9	
9596.0			1.5	18	9.0	11.0	
9598.0			1.5	19	9.2	11.1	
9600.0			1.5	19	9.3	11.1	
9602.0			1.5	19	9.3	11.0	
9604.0			1.5	18	9.3	11.0	
9606.0			1.5	19	9.3	11.3	
9608.0			1.5	21	9.4	11.6	
9610.0			1.5	21	9.4	11.4	
9612.0			1.5	20	9.4	11.1	
9614.0			1.5	20	9.4	11.1	
9616.0	2.7	240	1.5	21	9.3	11.1	D
9618.0			1.4	21	9.3	11.1	
9620.0			1.4	21	9.3	11.0	
9622.0			1.4	21	9.3	11.0	
9624.0			1.4	20	9.3	10.9	
9626.0			1.4	20	9.3	10.8	
9628.0			1.4	23	9.3	10.8	
9630.0	4.0	226	1.4	26	9.3	10.7	D
9632.0	3.8	232	1.4	27	9.3	10.6	D
9634.0			1.4	27	9.3	10.6	
9636.0			1.4	26	9.3	10.6	
9638.0	10.5	208	1.4	27	9.3	10.6	C
9640.0	5.7	281	1.4	27	9.4	10.5	C

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST :=A
9642.0	4.7	264	1.4	28	9.4	10.5	C
9644.0	3.5	213	1.4	28	9.4	10.4	A
9646.0	3.3	219	1.4	28	9.4	10.5	A
9648.0	4.6	302	1.4	29	9.3	10.5	C
9650.0	2.2	214	1.4	32	9.3	10.7	A
9652.0	6.3	222	1.4	32	9.3	10.7	A
9654.0	7.0	222	1.4	32	9.3	10.4	A
9656.0	4.5	193	1.4	32	9.3	10.1	A
9658.0	3.9	195	1.4	33	9.2	10.0	A
9660.0	3.3	210	1.4	32	9.1	9.8	A
9662.0			1.4	30	9.0	9.9	
9664.0			1.4	30	9.0	10.1	
9666.0			1.4	30	9.0	10.1	
9668.0			1.4	28	9.0	10.0	
9670.0	13.9	227	1.3	29	9.1	10.0	C
9672.0			1.3	32	9.1	10.1	
9674.0	4.2	167	1.3	36	9.1	10.1	B
9676.0	4.1	162	1.3	37	9.1	10.2	B
9678.0	44.7	153	1.3	38	9.1	10.2	B
9680.0	44.2	155	1.3	38	9.2	10.3	B
9682.0			1.4	36	9.2	10.2	
9684.0	9.0	171	1.4	37	9.1	10.1	D
9686.0	8.0	167	1.3	38	9.0	10.0	D
9688.0			1.3	37	9.0	10.0	
9690.0	4.0	247	1.3	36	9.2	10.2	D
9692.0	2.2	238	1.4	35	9.3	10.2	D
9694.0			1.4	34	9.3	10.3	
9696.0			1.3	34	9.3	10.5	
9698.0	26.1	163	1.3	33	9.3	10.6	D
9700.0	30.9	169	1.3	34	9.3	10.6	D
9702.0	30.8	168	1.3	35	9.4	10.7	D
9704.0			1.3	37	9.5	10.8	
9706.0			1.3	39	9.5	10.8	
9708.0			1.3	40	9.5	10.8	
9710.0	24.3	139	1.3	41	9.5	10.7	D
9712.0	23.7	136	1.3	41	9.5	10.7	D
9714.0			1.3	42	9.6	10.7	
9716.0			1.4	43	9.6	10.7	
9718.0			1.4	44	9.6	10.6	
9720.0	16.0	287	1.4	45	9.6	10.5	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9722.0			1.4	46	9.6	10.5	
9724.0			1.4	48	9.6	10.3	
9726.0			1.4	50	9.6	10.2	
9728.0			1.4	50	9.6	10.1	
9730.0	22.2	281	1.4	51	9.6	10.1	D
9732.0			1.4	51	9.6	10.1	
9734.0	4.8	137	1.4	52	9.6	10.0	A
9736.0	2.1	164	1.4	53	9.6	10.0	A
9738.0	3.2	214	1.5	54	9.5	9.9	A
9740.0			1.5	53	9.4	9.9	
9742.0			1.5	53	9.5	9.9	
9744.0	7.1	136	1.5	53	9.6	9.9	C
9746.0	3.6	142	1.5	53	9.6	9.9	A
9748.0	5.5	236	1.5	52	9.7	9.9	A
9750.0	11.6	175	1.5	51	9.7	9.9	C
9752.0	6.5	256	1.5	50	9.7	9.9	C
9754.0	11.9	116	1.5	50	9.6	9.9	D
9756.0	10.7	116	1.5	49	9.6	10.0	B
9758.0	9.3	117	1.5	48	9.6	10.0	B
9760.0			1.5	48	9.6	9.9	
9762.0			1.5	48	9.6	9.9	
9764.0			1.5	47	9.6	9.9	
9766.0	9.8	97	1.5	47	9.6	9.9	B
9768.0	6.2	101	1.5	47	9.5	9.9	B
9770.0	12.8	146	1.5	48	9.5	9.8	D
9772.0			1.6	48	9.5	9.8	
9774.0	6.5	218	1.6	47	9.5	9.8	D
9776.0	3.6	221	1.6	47	9.5	9.9	B
9778.0	4.9	202	1.6	48	9.5	9.9	B
9780.0	7.4	212	1.6	49	9.5	9.8	B
9782.0			1.5	47	9.3	9.7	
9784.0			1.5	47	9.1	9.5	
9786.0			1.5	48	9.0	9.3	
9788.0			1.5	47	8.9	9.2	
9790.0			1.6	46	9.0	9.3	
9792.0			1.6	47	9.2	9.4	
9794.0			1.6	47	9.3	9.5	
9796.0	2.5	243	1.6	47	9.4	9.5	C
9798.0	4.5	261	1.5	47	9.5	9.5	A
9800.0	3.8	243	1.6	47	9.5	9.4	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9802.0	3.8	221	1.6	48	9.4	9.4	A
9804.0	4.1	257	1.6	49	9.3	9.4	A
9806.0	5.3	241	1.6	49	9.1	9.4	A
9808.0	4.6	253	1.6	48	9.0	9.3	A
9810.0	8.0	235	1.6	48	9.0	9.2	A
9812.0	5.7	239	1.6	48	9.0	9.0	A
9814.0	6.0	250	1.6	48	8.8	8.9	A
9816.0			1.6	47	8.7	8.8	
9818.0	7.6	259	1.5	46	8.7	8.9	C
9820.0	8.1	258	1.5	46	8.8	9.0	C
9822.0	5.7	243	1.5	46	8.8	9.0	A
9824.0	5.3	265	1.5	47	8.8	9.0	A
9826.0	5.7	250	1.5	48	8.8	9.1	A
9828.0	10.2	263	1.5	49	8.9	9.1	C
9830.0			1.5	50	8.9	9.1	
9832.0			1.5	51	9.0	9.2	
9834.0	10.8	265	1.6	52	9.1	9.4	C
9836.0	4.4	202	1.6	51	9.3	9.5	C
9838.0	5.5	226	1.6	51	9.5	9.7	A
9840.0	1.4	201	1.6	49	9.6	9.8	A
9842.0	7.9	263	1.6	48	9.7	9.9	C
9844.0	7.3	277	1.6	46	9.7	9.9	A
9846.0	5.6	161	1.5	45	9.8	9.9	A
9848.0			1.5	46	9.8	9.9	
9850.0	3.6	132	1.5	46	9.9	9.9	C
9852.0	3.2	125	1.5	45	10.0	9.9	A
9854.0	3.4	149	1.5	44	10.0	9.9	A
9856.0	4.1	150	1.5	44	10.1	9.9	A
9858.0	2.8	154	1.5	45	10.1	10.0	A
9860.0	2.5	139	1.4	45	10.1	10.0	A
9862.0	3.0	128	1.4	46	10.1	9.9	A
9864.0	3.4	136	1.4	47	10.0	9.8	A
9866.0	3.9	132	1.4	47	10.0	9.8	A
9868.0	4.6	196	1.4	46	10.0	9.8	C
9870.0	2.5	216	1.4	45	10.0	9.8	C
9872.0	2.2	200	1.4	45	10.1	9.7	A
9874.0	3.0	154	1.4	46	10.0	9.7	A
9876.0	3.1	144	1.4	46	10.0	9.7	A
9878.0	3.2	360	1.4	46	10.0	9.7	C
9880.0	3.9	215	1.4	47	10.0	9.7	C

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9882.0	4.4	218	1.4	47	10.0	9.7	B
9884.0	6.4	297	1.4	47	10.0	9.7	B
9886.0	6.3	295	1.4	46	10.0	9.7	B
9888.0	4.2	273	1.3	46	10.0	9.7	B
9890.0	4.3	252	1.3	46	10.0	9.7	D
9892.0			1.3	46	10.0	9.7	
9894.0			1.3	46	9.9	9.7	
9896.0			1.2	48	10.0	9.8	
9898.0	2.9	248	1.2	53	10.0	9.8	D
9900.0	3.6	246	1.2	56	10.0	9.9	B
9902.0	14.5	269	1.2	52	10.0	9.9	C
9904.0	16.0	262	1.2	47	10.0	9.9	C
9906.0	13.5	262	1.2	47	9.9	9.9	A
9908.0	13.3	258	1.1	48	9.9	10.0	A
9910.0	5.3	295	1.1	49	9.9	10.0	B
9912.0	5.3	291	1.1	48	9.9	10.1	B
9914.0			1.1	48	9.9	10.1	
9916.0			1.1	41	9.9	10.1	
9918.0			1.1	45	9.9	10.1	
9920.0			1.1	55	9.9	10.1	
9922.0			1.1	55	9.8	10.0	
9924.0			1.2	57	9.8	9.9	
9926.0			1.1	60	9.8	9.9	
9928.0			1.1	60	9.8	9.9	
9930.0			1.1	58	9.9	10.0	
9932.0			1.1	60	9.8	10.0	
9934.0			1.1	64	9.8	10.0	
9936.0			1.1	64	9.8	10.0	
9938.0			1.1	63	9.8	10.0	
9940.0			1.1	63	9.8	9.9	
9942.0			1.1	64	9.8	9.9	
9944.0			1.1	64	9.8	9.9	
9946.0			1.1	64	9.8	9.9	
9948.0			1.1	63	9.9	9.9	
9950.0			1.1	62	9.9	9.9	
9952.0			1.1	65	9.9	9.9	
9954.0			1.1	67	9.8	9.8	
9956.0			1.1	64	9.7	9.8	
9958.0			1.1	63	9.8	9.8	
9960.0			1.2	64	9.8	9.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9962.0			1.2	64	9.8	9.9	
9964.0			1.2	62	9.8	9.9	
9966.0			1.2	63	9.8	9.9	
9968.0	26.0	194	1.2	63	9.7	9.8	D
9970.0	25.8	193	1.2	62	9.7	9.8	D
9972.0			1.2	61	9.7	9.8	
9974.0			1.2	60	9.7	9.8	
9976.0			1.2	59	9.6	9.7	
9978.0			1.2	58	9.6	9.6	
9980.0			1.2	56	9.6	9.6	
9982.0			1.2	55	9.6	9.5	
9984.0	33.2	207	1.2	55	9.6	9.3	D
9986.0	30.4	205	1.2	55	9.5	9.2	D
9988.0	7.8	230	1.2	54	9.4	9.2	D
9990.0	4.8	266	1.2	54	9.4	9.3	B
9992.0	4.8	266	1.2	54	9.5	9.4	B
9994.0	5.0	263	1.2	55	9.5	9.5	B
9996.0	7.6	270	1.2	53	9.6	9.5	D
9998.0			1.3	46	10.1	10.4	
10000.0			1.4	43	10.3	10.6	
10002.0			1.4	45	9.7	9.7	
10004.0			1.4	44	9.3	9.3	
10006.0			1.4	45	9.3	9.2	
10008.0	32.0	51	1.5	44	9.5	9.2	D
10010.0			1.5	44	9.5	9.2	
10012.0			1.5	44	9.5	9.1	
10014.0	1.4	225	1.5	46	9.5	9.1	D
10016.0			1.5	48	9.5	9.1	
10018.0	3.7	227	1.4	49	9.5	9.1	B
10020.0	3.7	223	1.5	50	9.5	9.1	B
10022.0			1.5	50	9.7	9.1	
10024.0			1.5	50	9.8	9.2	
10026.0			1.5	49	10.0	9.2	
10028.0			1.5	49	10.2	9.3	
10030.0	1.5	322	1.5	49	10.3	9.3	D
10032.0	1.4	327	1.5	50	10.4	9.3	D
10034.0	1.5	328	1.5	49	10.6	9.4	D
10036.0	4.7	281	1.5	49	10.8	9.4	D
10038.0	2.0	211	1.5	51	11.1	9.3	D
10040.0	31.3	280	1.5	51	11.4	9.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10042.0	9.5	73	1.5	51	11.7	9.4	D
10044.0	28.8	273	1.5	52	11.7	9.3	B
10046.0	29.3	270	1.5	51	11.7	9.2	B
10048.0			1.5	51	11.5	9.2	
10050.0			1.5	52	11.1	9.2	
10052.0			1.5	52	10.9	9.1	
10054.0			1.5	51	10.8	9.1	
10056.0			1.6	51	10.7	9.1	
10058.0			1.6	52	10.6	9.1	
10060.0			1.6	51	10.6	9.2	
10062.0	4.2	235	1.7	51	10.6	9.2	B
10064.0	3.2	246	1.6	51	10.7	9.2	B
10066.0	12.4	248	1.6	50	10.6	9.3	D
10068.0	5.8	245	1.6	49	10.4	9.4	D
10070.0	5.9	245	1.6	49	10.3	9.4	D
10072.0			1.6	50	10.2	9.3	
10074.0			1.6	51	10.1	9.2	
10076.0			1.6	52	10.1	9.2	
10078.0			1.6	52	10.1	9.3	
10080.0			1.5	53	10.1	9.3	
10082.0	51.5	71	1.6	53	10.2	9.3	D
10084.0			1.5	53	10.3	9.3	
10086.0			1.5	53	10.6	9.3	
10088.0			1.5	51	10.8	9.3	
10090.0			1.6	48	10.7	8.9	
10092.0			1.5	46	10.4	8.6	
10094.0			1.5	47	10.5	8.9	
10096.0			1.5	49	10.5	9.2	
10098.0			1.5	50	10.3	9.3	
10100.0			1.5	51	10.3	9.3	
10102.0			1.5	52	10.2	9.3	
10104.0			1.5	52	10.3	9.3	
10106.0			1.5	53	10.2	9.3	
10108.0			1.5	53	10.2	9.4	
10110.0			1.5	54	10.2	9.4	
10112.0			1.5	54	10.2	9.4	
10114.0			1.5	53	10.2	9.4	
10116.0			1.5	54	10.3	9.4	
10118.0			1.5	54	10.4	9.4	
10120.0			1.5	53	10.4	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10122.0			1.6	51	10.4	9.4	
10124.0			1.6	51	10.4	9.4	
10126.0			1.6	52	10.4	9.4	
10128.0			1.6	52	10.4	9.3	
10130.0			1.6	52	10.4	9.3	
10132.0			1.6	53	10.5	9.3	
10134.0			1.6	53	10.7	9.3	
10136.0			1.6	53	10.8	9.3	
10138.0			1.6	54	10.6	9.2	
10140.0			1.6	55	10.5	9.1	
10142.0			1.6	56	10.3	9.1	
10144.0			1.6	55	10.5	9.2	
10146.0			1.6	54	10.6	9.2	
10148.0			1.6	55	10.3	9.2	
10150.0			1.6	54	10.2	9.2	
10152.0			1.6	54	10.2	9.1	
10154.0			1.5	54	10.8	9.1	
10156.0			1.6	53	11.4	9.2	
10158.0			1.6	53	11.4	9.3	
10160.0			1.6	55	11.0	9.3	
10162.0			1.6	57	10.7	9.3	
10164.0			1.6	58	10.9	9.3	
10166.0			1.6	59	11.2	9.3	
10168.0			1.6	59	11.3	9.3	
10170.0			1.5	59	11.2	9.3	
10172.0			1.5	60	10.6	9.3	
10174.0			1.6	61	10.0	9.3	
10176.0			1.6	61	9.9	9.3	
10178.0	6.2	236	1.6	61	9.9	9.4	B
10180.0	6.7	228	1.6	61	9.7	9.3	B
10182.0			1.6	60	9.7	9.3	
10184.0	2.9	234	1.6	58	9.8	9.5	D
10186.0			1.6	56	9.7	9.5	
10188.0			1.6	56	9.6	9.5	
10190.0			1.6	54	9.6	9.5	
10192.0			1.6	53	9.5	9.5	
10194.0			1.6	52	9.5	9.5	
10196.0			1.6	53	9.5	9.5	
10198.0			1.6	55	9.5	9.4	
10200.0			1.6	55	9.4	9.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10202.0			1.6	54	9.5	9.4	
10204.0			1.6	53	9.5	9.5	
10206.0			1.6	54	9.5	9.6	
10208.0			1.6	54	9.5	9.5	
10210.0			1.7	53	9.3	9.4	
10212.0			1.7	51	9.0	9.1	
10214.0	3.9	216	1.7	52	8.8	8.9	B
10216.0	3.8	215	1.6	53	8.8	8.9	B
10218.0	1.4	260	1.6	53	8.8	8.9	D
10220.0	1.8	202	1.6	51	8.7	9.0	D
10222.0	2.9	209	1.6	52	8.8	9.2	D
10224.0	7.3	249	1.6	53	9.1	9.5	D
10226.0			1.6	54	9.2	9.6	
10228.0			1.6	54	9.2	9.8	
10230.0			1.6	54	9.2	9.7	
10232.0			1.6	54	9.2	9.6	
10234.0			1.7	53	9.2	9.6	
10236.0			1.7	53	9.3	9.8	
10238.0			1.6	53	9.3	9.9	
10240.0			1.6	54	9.3	9.8	
10242.0			1.6	53	9.2	9.8	
10244.0			1.6	53	9.3	9.8	
10246.0			1.6	53	9.4	9.7	
10248.0			1.6	54	9.3	9.7	
10250.0			1.6	53	9.2	9.5	
10252.0			1.6	52	9.1	9.4	
10254.0			1.6	52	9.0	9.3	
10256.0			1.6	53	8.9	9.2	
10258.0			1.6	53	8.9	9.1	
10260.0	2.5	238	1.7	52	8.9	9.1	B
10262.0	2.6	231	1.7	50	9.0	9.1	B
10264.0	4.1	192	1.7	50	9.0	9.2	D
10266.0			1.7	50	9.1	9.3	
10268.0	5.2	239	1.6	51	9.1	9.3	A
10270.0	4.8	202	1.6	52	9.2	9.2	A
10272.0	6.6	257	1.6	52	9.2	9.2	C
10274.0	5.7	226	1.6	51	9.3	9.2	C
10276.0	5.2	227	1.6	49	9.3	9.2	A
10278.0	5.0	235	1.6	49	9.3	9.2	A
10280.0	7.5	244	1.6	50	9.3	9.2	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10282.0	5.6	274	1.5	51	9.3	9.2	C
10284.0	4.2	245	1.5	52	9.3	9.1	A
10286.0	6.6	242	1.5	52	9.3	9.2	A
10288.0	5.0	224	1.5	52	9.4	9.2	A
10290.0	5.3	222	1.5	51	9.4	9.2	A
10292.0	4.9	235	1.5	49	9.4	9.2	A
10294.0	5.1	219	1.5	48	9.6	9.3	A
10296.0	4.5	215	1.5	47	9.8	9.3	A
10298.0	3.6	208	1.5	45	9.9	9.3	A
10300.0	2.7	206	1.5	43	9.7	9.3	A
10302.0	3.8	240	1.4	43	9.6	9.3	A
10304.0	3.8	238	1.4	45	9.6	9.3	A
10306.0			1.4	47	9.5	9.2	
10308.0			1.4	46	9.5	9.2	
10310.0			1.4	46	9.4	9.2	
10312.0	3.2	194	1.4	46	9.3	9.2	C
10314.0	2.3	234	1.4	47	9.3	9.2	A
10316.0	1.7	252	1.4	49	9.3	9.3	A
10318.0	3.1	252	1.4	50	9.3	9.3	A
10320.0	4.3	247	1.4	49	9.1	9.3	A
10322.0	6.4	239	1.4	49	9.1	9.2	C
10324.0	5.3	247	1.4	52	9.2	9.3	A
10326.0	6.5	252	1.4	56	9.3	9.3	A
10328.0	6.6	248	1.4	52	9.3	9.3	A
10330.0	5.4	232	1.4	47	9.3	9.4	A
10332.0	6.0	228	1.4	48	9.3	9.5	A
10334.0	6.2	228	1.4	48	9.4	9.6	A
10336.0	8.7	215	1.4	48	9.4	9.6	C
10338.0	2.9	210	1.4	49	9.4	9.8	A
10340.0	4.0	212	1.3	49	9.5	10.2	A
10342.0	4.2	237	1.4	47	9.9	11.1	C
10344.0	2.0	239	1.5	50	10.1	11.5	A
10346.0	2.5	242	1.5	57	10.0	11.4	A
10348.0	4.5	237	1.6	59	10.4	11.0	A
10350.0	4.3	248	1.6	59	10.8	10.9	A
10352.0	3.8	227	1.5	59	10.3	10.5	A
10354.0	3.6	237	1.4	59	9.6	9.8	A
10356.0	3.6	242	1.4	58	9.5	9.6	A
10358.0	5.9	223	1.4	56	9.5	9.5	A
10360.0	3.4	238	1.4	56	9.4	9.4	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10362.0			1.4	54	9.3	9.4	
10364.0			1.4	53	9.3	9.3	
10366.0			1.4	55	9.3	9.2	
10368.0			1.4	59	9.3	9.2	
10370.0			1.5	61	9.3	9.2	
10372.0			1.5	61	9.3	9.1	
10374.0	2.3	243	1.5	61	9.3	9.2	B
10376.0	2.7	263	1.5	61	9.2	9.2	B
10378.0	5.1	233	1.5	61	9.2	9.2	D
10380.0	4.1	204	1.5	60	9.2	9.1	D
10382.0	3.8	214	1.5	58	9.2	9.1	B
10384.0	3.8	213	1.5	56	9.2	9.1	B
10386.0	4.4	262	1.5	56	9.2	9.0	A
10388.0	4.7	243	1.5	55	9.3	9.0	A
10390.0	5.3	234	1.5	55	9.3	9.0	A
10392.0	5.1	231	1.5	55	9.4	9.0	A
10394.0	3.5	239	1.5	57	9.5	9.0	C
10396.0			1.5	59	9.6	9.0	
10398.0	8.0	190	1.6	59	9.8	9.0	C
10400.0	2.7	229	1.6	59	9.9	9.0	A
10402.0	2.8	234	1.6	59	9.9	8.9	A
10404.0	2.1	236	1.6	59	10.0	8.9	A
10406.0			1.6	59	10.2	8.9	
10408.0			1.6	59	10.3	8.9	
10410.0			1.5	58	10.8	8.9	
10412.0			1.5	58	11.1	8.9	
10414.0			1.5	58	11.3	8.8	
10416.0			1.5	58	11.6	8.8	
10418.0			1.6	60	11.9	8.8	
10420.0			1.6	59	12.0	8.9	
10422.0			1.5	60	12.0	8.9	
10424.0			1.5	61	12.0	8.9	
10426.0			1.5	60	12.1	9.0	
10428.0			1.5	59	12.1	9.1	
10430.0	12.2	125	1.5	59	11.9	9.1	C
10432.0	8.4	187	1.5	60	11.6	9.1	A
10434.0	8.6	171	1.5	60	11.5	9.1	A
10436.0			1.5	60	11.3	9.1	
10438.0			1.5	61	10.9	9.1	
10440.0			1.5	61	10.6	9.1	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10442.0	13.7	195	1.5	59	10.5	9.1	C
10444.0	10.8	225	1.5	59	10.2	9.1	C
10446.0	4.3	235	1.5	58	9.8	9.1	A
10448.0	4.4	236	1.5	56	9.5	9.0	A
10450.0	4.9	231	1.5	57	9.4	9.0	A
10452.0	4.8	227	1.5	56	9.3	9.1	C
10454.0	11.9	263	1.6	55	9.3	9.1	A
10456.0	4.6	255	1.6	55	9.3	9.1	A
10458.0			1.6	58	9.3	9.1	
10460.0			1.6	59	9.4	9.2	
10462.0	3.4	354	1.7	57	9.5	9.2	C
10464.0			1.7	55	9.4	9.2	
10466.0	10.7	180	1.7	54	9.4	9.1	C
10468.0	10.8	178	1.7	54	9.4	9.1	C
10470.0	4.8	234	1.7	53	9.4	9.2	C
10472.0	4.2	228	1.7	53	9.4	9.2	C
10474.0	4.3	229	1.7	51	9.4	9.2	C
10476.0	3.2	215	1.7	50	9.5	9.2	A
10478.0	3.8	215	1.8	51	9.4	9.2	A
10480.0			1.8	50	9.4	9.2	
10482.0	4.7	249	1.8	49	9.4	9.3	C
10484.0	4.0	239	1.8	49	9.4	9.2	A
10486.0	4.5	233	1.8	48	9.3	9.2	A
10488.0	4.9	232	1.8	46	9.3	9.2	A
10490.0	4.7	230	1.9	44	9.3	9.2	A
10492.0	4.1	232	1.9	43	9.3	9.2	A
10494.0	4.8	236	1.9	43	9.2	9.2	A
10496.0	4.8	232	1.9	42	9.2	9.2	A
10498.0	2.9	175	1.9	43	9.3	9.3	D
10500.0			1.9	43	9.2	9.3	
10502.0	5.4	137	1.9	44	9.1	9.3	D
10504.0			1.9	44	9.0	9.2	
10506.0			1.9	44	9.0	9.2	
10508.0			1.9	45	9.1	9.2	
10510.0			2.0	45	9.0	9.2	
10512.0			2.0	45	8.9	9.1	
10514.0			2.0	45	8.9	9.1	
10516.0	6.4	240	2.1	46	8.9	9.1	A
10518.0	10.2	203	2.2	45	9.0	9.1	A
10520.0	10.2	24	2.2	44	9.0	9.2	C

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST -A
10522.0	1.9	270	2.3	41	9.5	9.9	A
10524.0	1.4	213	2.3	40	9.5	10.1	A
10526.0	6.1	207	2.2	41	9.2	9.4	A
10528.0	7.7	216	2.2	40	9.2	9.1	A
10530.0			2.2	38	9.2	8.9	
10532.0			2.2	38	9.0	8.9	
10534.0			2.2	38	8.9	8.9	
10536.0			2.2	37	8.9	8.8	
10538.0			2.2	37	8.9	8.8	
10540.0			2.2	37	8.9	8.9	
10542.0			2.2	36	8.9	8.9	
10544.0			2.2	37	8.8	9.0	
10546.0			2.2	38	8.8	9.0	
10548.0			2.2	38	8.8	9.1	
10550.0			2.2	39	8.9	9.1	
10552.0			2.2	40	8.9	9.0	
10554.0			2.2	40	8.9	9.0	
10556.0	27.9	89	2.2	39	8.9	8.9	D
10558.0			2.2	37	8.9	8.9	
10560.0			2.2	35	8.9	9.0	
10562.0	35.6	82	2.2	34	8.9	9.0	D
10564.0			2.3	34	8.8	9.0	
10566.0			2.3	33	8.9	9.1	
10568.0			2.3	34	9.1	9.1	
10570.0			2.4	32	9.2	9.2	
10572.0			2.4	33	9.4	9.1	
10574.0			2.4	34	9.6	9.1	
10576.0			2.5	33	9.6	9.0	
10578.0			2.5	33	9.4	9.0	
10580.0			2.6	33	9.3	9.0	
10582.0			2.6	32	9.3	9.0	
10584.0			2.7	30	9.4	8.9	
10586.0			2.7	29	9.4	9.0	
10588.0			2.7	29	9.4	9.1	
10590.0			2.8	28	9.3	9.1	
10592.0			2.8	29	9.4	8.9	
10594.0			2.8	30	9.6	8.8	
10596.0			2.9	30	9.8	8.8	
10598.0			3.0	31	10.0	8.9	
10600.0			3.0	32	10.0	8.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10602.0			3.1	34	10.2	8.8	
10604.0			3.1	36	10.3	8.8	
10606.0			3.2	36	9.9	8.7	
10608.0	38.9	247	3.2	35	9.6	8.9	D
10610.0			3.4	33	10.1	8.9	
10612.0	39.8	248	3.4	30	10.8	8.9	D
10614.0			3.5	29	11.2	8.9	
10616.0			3.6	30	11.3	8.9	
10618.0			3.6	31	11.4	8.8	
10620.0	28.8	206	3.6	31	11.3	8.7	D
10622.0	29.2	207	3.6	31	11.1	8.6	D
10624.0	21.3	203	3.6	31	11.1	8.7	D
10626.0			3.7	32	11.1	8.7	
10628.0			3.7	33	11.3	8.6	
10630.0	25.9	184	3.8	35	11.7	8.6	D
10632.0	27.6	196	3.8	35	11.8	8.6	D
10634.0			3.8	35	11.6	8.6	
10636.0			3.9	35	11.5	8.5	
10638.0			3.9	36	11.5	8.6	
10640.0			4.0	38	11.5	8.7	
10642.0			4.0	39	11.2	8.5	
10644.0			4.0	41	11.1	8.5	
10646.0			4.1	42	11.3	8.5	
10648.0			4.1	43	11.4	8.5	
10650.0			4.1	43	11.4	8.5	
10652.0			4.0	43	11.2	8.5	
10654.0			4.0	43	10.7	8.5	
10656.0			4.0	45	10.5	8.5	
10658.0			4.0	47	10.4	8.7	
10660.0			4.1	48	10.4	8.7	
10662.0			4.1	49	10.4	8.7	
10664.0			4.2	49	10.5	8.7	
10666.0			4.2	49	10.3	8.7	
10668.0			4.3	50	10.0	8.7	
10670.0			4.3	51	9.9	8.7	
10672.0			4.4	51	9.9	8.8	
10674.0			4.4	52	9.5	8.8	
10676.0			4.4	52	9.2	8.7	
10678.0			4.4	55	9.1	8.6	
10680.0			4.5	57	9.1	8.6	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10682.0			4.6	59	9.4	8.7	
10684.0	12.6	269	4.6	62	9.8	8.7	D
10686.0	12.7	273	4.6	68	10.1	8.7	D
10688.0			4.7	71	10.4	8.9	
10690.0			4.8	70	10.7	8.9	
10692.0			4.8	69	10.6	8.9	
10694.0			4.8	71	10.3	8.7	
10696.0			4.9	72	10.5	8.6	
10698.0			4.9	73	10.9	8.5	
10700.0			4.9	74	11.0	8.5	
10702.0			4.9	79	11.1	8.5	
10704.0			4.9	84	11.2	8.5	
10706.0			4.9	86	11.0	8.5	
10708.0			5.0	85	11.0	8.4	
10710.0			5.0	87	11.1	8.5	
10712.0			5.0	91	11.1	8.5	
10714.0			5.0	87	11.0	8.4	
10716.0			5.0	83	10.9	8.4	
10718.0			5.0	83	10.8	8.4	
10720.0			5.0	83	10.5	8.4	
10722.0			5.1	83	10.2	8.4	
10724.0			5.1	84	10.2	8.4	
10726.0			5.1	92	10.2	8.4	
10728.0			5.2	96	10.3	8.5	
10730.0			5.2	94	10.5	8.5	
10732.0			5.2	95	10.6	8.5	
10734.0			5.2	93	10.5	8.5	
10736.0			5.2	92	10.5	8.5	
10738.0			5.3	94	10.6	8.5	
10740.0			5.3	91	10.7	8.4	
10742.0			5.3	87	10.9	8.5	
10744.0			5.3	86	11.1	8.6	
10746.0			5.3	85	10.8	8.5	
10748.0			5.3	84	10.6	8.4	
10750.0			5.3	85	10.7	8.3	
10752.0			5.3	86	10.8	8.3	
10754.0			5.4	87	11.0	8.3	
10756.0			5.4	89	11.2	8.3	
10758.0			5.4	89	11.6	8.2	
10760.0			5.4	89	11.9	8.2	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10762.0			5.4	88	12.1	8.3	
10764.0			5.4	89	12.0	8.3	
10766.0			5.4	90	11.7	8.4	
10768.0			5.4	90	11.8	8.5	
10770.0			5.3	90	12.0	8.5	
10772.0			5.3	90	11.9	8.6	
10774.0			5.2	89	11.8	8.6	
10776.0			5.2	89	12.0	8.6	
10778.0			5.1	88	11.8	8.7	
10780.0			5.2	90	11.6	8.6	
10782.0			5.2	92	11.5	8.7	
10784.0			5.2	90	11.3	8.7	
10786.0			5.1	89	11.3	8.6	
10788.0			5.0	90	11.2	8.5	
10790.0			5.0	90	11.0	8.6	
10792.0			5.0	88	11.0	8.7	
10794.0			5.0	88	11.5	8.7	
10796.0			5.1	86	11.1	8.7	
10798.0			5.2	83	9.9	8.8	
10800.0			5.2	82	9.4	8.7	
10802.0			5.2	83	9.4	8.7	
10804.0			5.2	84	9.4	8.7	
10806.0			5.2	85	9.4	8.7	
10808.0			5.2	85	9.5	8.7	
10810.0			5.2	85	9.4	8.7	
10812.0			5.2	85	9.4	8.7	
10814.0			5.2	85	9.4	8.8	
10816.0			5.2	86	9.4	8.8	
10818.0			5.1	86	9.4	8.8	
10820.0			5.1	88	9.6	8.8	
10822.0			5.1	89	9.8	8.7	
10824.0			5.0	91	10.0	8.7	
10826.0			5.0	91	10.1	8.7	
10828.0			5.0	92	10.3	8.8	
10830.0			5.0	92	10.5	8.8	
10832.0			5.0	91	10.6	8.8	
10834.0			5.0	91	10.6	8.8	
10836.0	8.2	266	5.0	91	10.6	8.8	D
10838.0			5.0	92	10.7	8.8	
10840.0	3.8	278	5.0	92	10.6	8.8	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10842.0	3.9	280	5.1	93	10.6	8.9	B
10844.0			5.1	92	10.8	8.8	
10846.0			5.2	91	11.0	8.8	
10848.0			5.3	91	11.2	8.8	
10850.0			5.5	91	11.5	8.8	
10852.0			5.7	92	11.7	8.8	
10854.0			5.4	92	12.1	8.9	
10856.0			5.1	90	12.4	8.9	
10858.0			5.1	90	12.4	8.9	
10860.0			5.0	90	12.3	8.9	
10862.0			4.9	91	12.1	8.9	
10864.0			4.9	91	11.8	8.7	
10866.0			4.9	93	11.7	8.6	
10868.0			4.9	92	12.0	8.7	
10870.0			4.9	91	12.0	8.7	
10872.0			4.9	89	11.4	8.7	
10874.0			4.9	89	10.9	8.7	
10876.0			4.9	90	10.9	8.7	
10878.0			4.8	89	11.0	8.7	
10880.0			4.8	88	11.3	8.8	
10882.0			4.8	88	11.3	8.7	
10884.0			4.7	88	10.9	8.6	
10886.0			4.7	87	10.4	8.6	
10888.0			4.6	88	10.5	8.5	
10890.0			4.6	89	11.0	8.6	
10892.0			4.6	89	11.3	8.6	
10894.0			4.6	87	11.4	8.7	
10896.0			4.5	87	10.8	8.7	
10898.0			4.5	90	9.9	8.7	
10900.0			4.5	92	9.5	8.8	
10902.0			4.5	94	9.3	8.8	
10904.0			4.5	95	9.2	8.8	
10906.0	3.7	338	4.5	96	9.2	8.8	D
10908.0			4.5	96	9.1	8.9	
10910.0			4.6	95	9.0	8.9	
10912.0	3.9	251	4.6	95	8.9	9.0	B
10914.0	3.9	249	4.6	95	8.9	9.1	B
10916.0	9.7	230	4.6	95	8.9	9.2	D
10918.0			4.6	95	9.0	9.4	
10920.0	2.9	163	4.5	94	9.0	9.4	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10922.0			4.5	93	9.0	9.3	
10924.0			4.5	94	9.0	9.2	
10926.0			4.4	95	8.9	9.1	
10928.0			4.4	95	8.8	9.1	
10930.0			4.4	95	8.8	9.2	
10932.0			4.4	96	8.8	9.2	
10934.0			4.4	97	8.8	9.4	
10936.0			4.3	99	8.8	9.6	
10938.0			4.3	100	8.8	9.6	
10940.0	24.7	138	4.3	100	8.9	9.5	D
10942.0	28.9	145	4.3	99	8.9	9.7	D
10944.0	13.9	191	4.3	98	8.9	10.0	D
10946.0			4.3	97	8.8	10.6	
10948.0	17.0	198	4.4	98	8.7	11.3	D
10950.0	16.3	195	4.3	99	8.7	11.9	D
10952.0			4.2	100	8.6	12.0	
10954.0			4.2	100	8.6	11.9	
10956.0	3.0	71	4.2	100	8.7	11.5	D
10958.0			4.3	100	8.8	11.4	
10960.0			4.4	100	8.9	11.5	
10962.0	6.4	17	4.4	100	8.9	11.0	C
10964.0			4.5	98	9.3	11.3	
10966.0	6.9	275	4.7	95	9.7	11.6	D
10968.0	7.0	273	4.6	95	9.6	11.2	B
10970.0	6.5	305	4.5	94	9.8	11.0	D
10972.0	8.6	306	4.5	92	9.8	10.7	B
10974.0	5.3	253	4.5	93	9.6	10.4	A
10976.0	5.3	258	4.4	93	9.7	11.0	A
10978.0	5.2	234	4.2	92	10.2	11.7	C
10980.0	6.2	243	4.0	92	10.1	11.8	C
10982.0	4.8	275	4.0	92	9.9	11.4	A
10984.0	5.3	172	4.2	93	9.7	11.0	A
10986.0	9.1	179	4.2	94	9.2	10.8	A
10988.0	4.2	260	4.3	95	9.0	10.6	A
10990.0			4.4	95	9.6	11.1	
10992.0	9.1	195	4.4	95	10.3	11.7	C
10994.0	4.3	284	4.6	95	9.7	11.4	A
10996.0	3.9	268	4.6	94	9.2	11.3	A
10998.0	2.9	162	4.1	93	9.4	11.8	A
11000.0	4.0	128	3.9	92	9.8	11.8	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11002.0	6.8	253	4.0	89	10.3	11.5	A
11004.0	7.4	254	4.0	88	10.7	11.4	A
11006.0			3.9	89	11.2	11.5	
11008.0			3.8	88	11.5	11.7	
11010.0	7.5	188	3.8	89	10.9	11.7	A
11012.0	5.2	177	3.7	90	9.8	11.4	A
11014.0	3.4	180	3.7	90	9.4	11.2	A
11016.0	2.5	177	3.7	90	9.5	11.4	A
11018.0	4.4	159	3.7	90	9.7	11.4	A
11020.0	7.5	262	3.8	89	10.0	11.3	A
11022.0	10.8	278	3.8	89	10.4	11.2	A
11024.0	7.5	276	3.9	84	10.4	11.1	C
11026.0	5.3	258	3.8	80	9.9	10.6	C
11028.0	2.3	195	3.8	84	9.4	10.2	A
11030.0	3.4	181	3.7	83	9.1	10.0	C
11032.0	2.3	216	3.7	76	9.0	10.0	A
11034.0	6.5	250	3.7	70	8.9	10.1	C
11036.0	3.1	230	3.7	74	8.8	10.2	A
11038.0			3.7	79	8.9	10.2	
11040.0			3.8	86	8.9	10.3	
11042.0	1.9	234	3.7	90	9.0	10.6	A
11044.0	3.6	212	3.6	90	9.3	11.0	B
11046.0	4.1	206	3.6	90	10.2	11.5	B
11048.0	6.2	150	3.5	90	10.9	11.6	D
11050.0	3.7	144	3.4	86	10.3	11.2	D
11052.0	9.4	220	3.4	87	9.6	11.1	D
11054.0	3.8	224	3.3	87	9.2	10.9	D
11056.0	2.6	315	3.3	89	9.3	10.4	D
11058.0	5.0	221	3.3	91	9.8	10.2	D
11060.0	7.5	270	3.4	92	9.9	10.1	D
11062.0			3.4	93	9.8	9.7	
11064.0			3.4	93	10.0	9.3	
11066.0	4.6	259	3.4	93	9.8	9.2	A
11068.0	4.8	259	3.4	93	9.7	9.2	A
11070.0	2.6	15	3.4	92	9.8	9.1	C
11072.0			3.5	93	9.9	8.9	
11074.0			3.6	93	10.0	8.8	
11076.0	7.3	293	3.6	93	10.3	8.8	C
11078.0	2.7	169	3.6	93	10.5	8.9	A
11080.0	3.2	171	3.6	92	10.7	9.0	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11082.0	5.9	163	3.5	91	10.8	9.0	A
11084.0	3.4	220	3.5	89	10.5	9.0	A
11086.0	3.2	222	3.4	87	9.9	9.0	A
11088.0	3.4	245	3.4	87	9.8	9.0	A
11090.0	2.9	241	3.5	87	9.8	9.0	A
11092.0	2.7	247	3.5	86	9.8	9.0	A
11094.0	2.8	267	3.5	88	9.7	9.0	A
11096.0	5.4	249	3.5	89	9.6	9.0	A
11098.0	4.6	249	3.5	89	9.5	9.1	A
11100.0	3.1	256	3.5	88	9.4	9.1	A
11102.0	3.4	258	3.5	87	9.3	9.0	A
11104.0	6.0	269	3.5	85	9.4	9.0	A
11106.0	4.0	267	3.4	83	9.3	9.1	A
11108.0	3.9	261	3.4	83	9.2	9.1	C
11110.0	4.0	250	3.4	84	9.0	9.1	C
11112.0	4.0	254	3.4	85	8.9	9.1	A
11114.0	3.7	258	3.5	84	9.0	9.0	A
11116.0	3.5	255	3.4	83	9.1	9.0	A
11118.0	3.9	254	3.4	83	9.2	9.0	A
11120.0	12.0	235	3.4	84	9.4	9.0	D
11122.0	2.7	269	3.4	85	9.9	8.9	D
11124.0			3.4	85	10.5	9.0	
11126.0			3.5	86	10.7	9.1	
11128.0			3.4	85	10.4	9.2	
11130.0			3.4	83	10.0	9.1	
11132.0	3.8	250	3.4	84	9.7	9.0	D
11134.0	3.6	253	3.4	86	9.6	8.9	B
11136.0	3.7	60	3.3	85	9.6	9.0	C
11138.0	1.6	295	3.3	84	9.7	9.0	A
11140.0	4.5	248	3.4	85	9.6	9.0	A
11142.0	5.1	273	3.5	85	9.4	9.0	A
11144.0	13.6	263	3.5	85	9.4	9.1	A
11146.0	19.4	266	3.5	85	9.3	9.1	A
11148.0	15.5	270	3.6	86	9.6	9.2	A
11150.0	12.2	271	3.8	84	9.7	9.1	A
11152.0	9.4	261	3.9	83	9.8	9.0	A
11154.0	8.9	252	3.9	84	9.9	9.1	A
11156.0	9.6	261	3.9	83	9.8	9.2	A
11158.0	8.8	260	3.9	82	9.5	9.2	A
11160.0	9.2	260	4.0	81	9.3	9.1	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11162.0	9.5	261	4.0	81	9.3	9.1	A
11164.0	9.0	258	4.0	81	9.5	9.1	A
11166.0	5.6	253	4.1	81	9.5	9.0	A
11168.0	4.7	251	4.1	80	9.4	9.1	A
11170.0			4.1	81	9.3	9.2	
11172.0			4.0	82	9.6	9.2	
11174.0	5.0	257	4.0	82	10.1	9.1	B
11176.0	4.8	229	4.0	81	10.1	9.1	D
11178.0	6.1	252	4.0	82	9.8	9.0	A
11180.0	6.0	256	4.0	83	9.6	8.9	A
11182.0	7.6	262	4.1	83	9.6	9.0	A
11184.0	4.7	253	4.1	84	9.7	8.9	A
11186.0	3.5	266	4.1	84	9.6	8.9	A
11188.0	3.4	281	4.2	83	9.6	9.0	A
11190.0	5.7	250	4.2	83	9.6	9.0	A
11192.0	4.4	268	4.2	83	9.6	9.0	A
11194.0	3.8	262	4.3	84	9.9	9.0	A
11196.0	4.0	251	4.3	84	10.0	9.0	A
11198.0	5.1	247	4.3	84	10.6	9.1	B
11200.0	4.0	193	4.3	84	11.5	9.1	D
11202.0			4.3	82	11.8	9.1	
11204.0	4.8	279	4.4	82	11.8	9.1	D
11206.0	6.7	271	4.6	83	12.7	9.6	D
11208.0	8.8	8	4.7	83	13.5	10.0	D
11210.0	6.8	11	4.5	82	12.9	9.8	D
11212.0	9.0	356	4.5	81	12.3	9.8	D
11214.0			4.6	81	12.0	9.5	
11216.0	7.0	251	4.9	82	11.5	9.1	A
11218.0	7.5	246	5.3	82	11.2	9.2	A
11220.0	7.3	255	5.2	82	10.3	9.2	A
11222.0			4.8	81	9.6	9.2	
11224.0			4.6	81	9.7	9.2	
11226.0	5.1	246	4.6	81	9.5	9.1	A
11228.0	5.2	247	4.7	81	9.3	8.9	A
11230.0	7.3	302	4.7	82	9.4	8.8	C
11232.0	8.9	290	4.7	83	9.8	8.8	C
11234.0	7.1	224	4.6	82	9.8	8.9	A
11236.0	7.1	288	4.5	82	9.6	8.9	C
11238.0	6.8	280	4.5	82	9.6	8.9	A
11240.0	3.8	283	4.4	83	9.6	8.9	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11242.0	3.3	223	4.4	85	9.7	8.8	A
11244.0	4.0	230	4.4	84	10.0	8.8	C
11246.0	2.7	234	4.4	83	10.0	8.8	A
11248.0	5.3	282	4.4	83	9.8	8.9	A
11250.0	5.9	231	4.4	82	9.9	8.9	A
11252.0	7.6	201	4.4	81	10.4	8.9	A
11254.0	2.7	274	4.5	81	10.9	8.8	C
11256.0	11.0	255	4.6	82	11.1	8.8	C
11258.0	8.6	238	4.7	82	11.7	8.7	A
11260.0	7.1	275	4.7	83	11.7	8.7	A
11262.0	4.9	278	4.6	83	11.0	8.8	A
11264.0	3.8	317	4.4	83	10.6	8.8	A
11266.0	7.7	3	4.3	84	9.8	8.7	C
11268.0	16.9	231	4.3	84	9.4	8.8	C
11270.0	9.0	240	4.3	86	9.3	8.8	A
11272.0	6.6	260	4.1	87	9.5	8.9	A
11274.0	1.9	255	4.1	88	10.1	9.1	A
11276.0			4.1	89	10.1	9.0	
11278.0	4.5	218	4.1	88	9.6	8.8	A
11280.0	4.2	260	4.1	85	9.6	8.9	A
11282.0	5.4	18	4.0	84	10.0	9.0	C
11284.0	1.6	296	4.1	86	10.3	9.1	C
11286.0	5.1	236	4.3	87	10.2	9.1	A
11288.0	4.0	221	4.3	86	9.7	9.1	C
11290.0	3.9	219	4.3	85	9.3	9.0	A
11292.0	4.7	216	4.2	83	9.2	9.0	A
11294.0	3.8	236	4.2	82	9.1	9.0	A
11296.0	4.0	245	4.2	82	9.0	8.9	A
11298.0	3.7	263	4.2	83	8.8	8.9	A
11300.0	6.8	268	4.3	84	8.7	8.9	A
11302.0			4.4	84	8.8	8.9	
11304.0	4.7	243	4.4	83	8.8	8.9	A
11306.0	4.0	236	4.5	81	8.8	8.9	A
11308.0	3.6	241	4.5	80	8.8	8.9	A
11310.0	4.2	250	4.4	81	8.8	8.8	A
11312.0	6.2	216	4.4	81	8.8	8.8	C
11314.0	7.0	208	4.4	80	8.8	8.8	A
11316.0	5.6	235	4.4	80	8.8	8.8	A
11318.0	6.5	249	4.4	80	8.8	8.8	A
11320.0	4.3	242	4.4	81	8.9	8.9	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11322.0	4.1	232	4.4	81	8.9	8.9	A
11324.0	4.7	230	4.3	81	8.8	8.9	A
11326.0	3.4	227	4.3	81	8.8	8.9	A
11328.0	4.4	225	4.3	81	8.9	8.8	A
11330.0	4.3	241	4.3	81	8.9	8.8	A
11332.0	4.3	236	4.3	80	8.9	8.7	A
11334.0	4.1	229	4.2	80	8.8	8.6	A
11336.0	3.4	220	4.0	80	8.8	8.6	A
11338.0	4.0	231	4.0	79	8.8	8.7	A
11340.0	4.7	230	4.1	79	8.8	8.8	A
11342.0	4.0	226	4.1	80	8.7	8.8	A
11344.0	4.1	238	4.2	81	8.7	8.8	A
11346.0	4.4	239	4.2	82	8.8	8.8	A
11348.0	4.0	235	4.2	83	8.8	8.8	A
11350.0	5.6	232	4.3	82	8.8	8.8	A
11352.0	6.3	226	4.4	81	8.8	8.7	A
11354.0	5.1	234	4.6	82	8.8	8.7	A
11356.0	5.5	243	4.7	82	8.8	8.7	A
11358.0	5.5	246	4.8	84	8.7	8.6	A
11360.0	5.3	239	4.9	84	8.9	8.6	A
11362.0	5.4	238	5.0	84	9.0	8.6	A
11364.0	4.7	236	4.9	83	8.7	8.6	A
11366.0	3.8	225	4.8	81	8.6	8.7	A
11368.0	4.2	234	4.9	83	8.6	8.6	A
11370.0	5.0	233	4.8	86	8.7	8.6	A
11372.0	5.3	231	4.7	87	8.6	8.6	A
11374.0	5.3	232	4.6	89	8.6	8.6	A
11376.0	4.7	239	4.6	89	8.5	8.6	A
11378.0	4.2	247	4.6	89	8.6	8.6	A
11380.0	4.1	255	4.6	89	8.6	8.6	A
11382.0	5.1	245	4.6	91	8.5	8.6	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11084.0			3.4	78	9.3	9.3	
11086.0	3.6	243	3.4	78	9.3	9.3	A
11088.0	2.9	249	3.4	78	9.2	9.3	A
11090.0	3.0	238	3.4	78	9.1	9.3	A
11092.0	2.8	237	3.3	79	9.0	9.3	A
11094.0	2.9	246	3.3	82	8.9	9.3	A
11096.0	5.5	270	3.2	83	9.0	9.3	A
11098.0	3.5	255	3.2	82	9.1	9.2	A
11100.0	2.5	230	3.2	82	9.1	9.3	A
11102.0	2.7	235	3.2	82	9.1	9.3	A
11104.0	4.0	253	3.2	84	9.1	9.3	A
11106.0	3.9	261	3.2	85	9.1	9.2	A
11108.0	3.7	263	3.2	84	9.1	9.2	A
11110.0	3.7	262	3.2	83	9.1	9.1	A
11112.0	4.1	258	3.2	80	9.0	9.1	A
11114.0	4.5	248	3.2	78	9.0	9.1	A
11116.0	4.1	256	3.2	82	9.0	9.1	A
11118.0	3.7	256	3.2	89	9.0	9.3	A
11120.0			3.3	90	9.0	9.6	
11122.0			3.2	90	9.0	10.1	
11124.0			3.2	90	9.0	10.6	
11126.0			3.1	82	9.1	10.7	
11128.0			3.1	77	9.2	10.5	
11130.0			3.2	79	9.2	10.1	
11132.0	4.7	247	3.2	77	9.1	9.8	D
11134.0	3.3	289	3.2	80	9.0	9.6	B
11136.0	1.2	165	3.3	84	9.0	9.6	B
11138.0	2.3	282	3.3	85	9.0	9.8	B
11140.0	3.1	232	3.3	87	8.9	9.6	B
11142.0	3.5	299	3.3	86	9.0	9.4	B
11144.0	10.9	253	3.3	85	9.1	9.4	D
11146.0	17.1	269	3.4	84	9.2	9.3	B
11148.0	11.8	266	3.4	84	9.2	9.4	D
11150.0	11.7	274	3.6	83	9.2	9.5	A
11152.0	9.5	267	3.7	83	9.3	9.6	A
11154.0	9.4	264	3.7	82	9.3	9.6	A
11156.0	8.4	260	3.7	81	9.3	9.5	A
11158.0	8.4	262	3.7	81	9.2	9.4	A
11160.0	8.5	263	3.7	82	9.2	9.3	A
11162.0	8.5	262	3.7	81	9.2	9.3	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11164.0	9.6	259	3.8	80	9.3	9.4	A
11166.0	5.4	249	3.8	77	9.3	9.3	A
11168.0	5.3	248	3.8	80	9.2	9.3	C
11170.0	7.1	271	3.7	86	9.2	9.3	C
11172.0	7.3	273	3.7	88	9.1	9.4	A
11174.0	5.9	264	3.9	90	9.0	10.0	A
11176.0	9.1	280	4.0	89	9.0	10.6	C
11178.0	5.7	265	3.9	90	9.0	10.2	A
11180.0	6.2	266	3.9	91	8.9	9.6	A
11182.0	6.7	276	3.8	90	9.0	9.7	A
11184.0	4.7	252	3.8	82	8.9	9.7	A
11186.0	3.4	244	3.8	74	9.0	9.5	A
11188.0	3.9	266	3.9	82	9.0	9.5	A
11190.0	5.9	266	4.0	89	9.0	9.6	A
11192.0	4.4	269	4.0	89	9.0	9.6	A
11194.0	4.3	263	4.2	89	9.0	9.8	A
11196.0	5.2	257	4.4	88	9.0	10.1	A
11198.0	7.7	258	4.5	89	9.0	10.9	A
11200.0	4.3	347	4.5	85	9.1	11.6	C
11202.0	7.7	299	4.5	82	9.1	11.7	C
11204.0	7.8	277	4.6	85	9.1	11.7	A
11206.0	6.8	269	4.6	89	9.5	12.6	A
11208.0			4.4	89	9.8	13.3	
11210.0	4.1	328	4.3	88	10.1	13.2	A
11212.0			4.2	88	10.3	13.0	
11214.0			4.2	88	9.8	12.5	
11216.0	6.6	265	4.2	88	9.3	11.6	A
11218.0	6.5	259	4.4	89	9.2	11.1	A
11220.0	6.5	262	4.5	89	9.3	10.8	A
11222.0	6.1	259	4.5	89	9.2	10.3	A
11224.0	7.8	265	4.5	89	9.2	10.0	C
11226.0	5.2	252	4.5	88	9.0	9.6	A
11228.0	5.0	254	4.4	89	8.9	9.3	A
11230.0	6.7	296	4.4	91	8.8	9.6	C
11232.0	6.0	290	4.4	90	8.8	10.0	C
11234.0	5.1	249	4.3	91	8.9	9.9	C
11236.0			4.2	91	8.9	9.6	
11238.0	9.1	240	4.2	91	9.0	9.6	C
11240.0	7.4	249	4.2	92	8.9	9.7	A
11242.0	3.2	239	4.2	92	8.9	9.8	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11244.0	3.5	267	4.3	90	8.8	10.1	A
11246.0	3.1	264	4.3	90	8.9	10.0	A
11248.0	4.9	273	4.4	90	8.9	9.8	A
11250.0	6.2	237	4.4	89	8.9	10.0	A
11252.0	7.9	214	4.4	90	8.8	10.3	A
11254.0	3.0	320	4.5	90	8.9	10.8	C
11256.0	6.0	94	4.4	89	8.8	11.4	C
11258.0	1.5	252	4.4	91	8.7	12.0	C
11260.0	4.0	296	4.5	86	8.8	11.3	A
11262.0	2.5	242	4.6	73	8.9	9.9	A
11264.0	1.0	198	4.5	77	8.9	9.5	A
11266.0	6.0	40	4.5	82	8.8	9.4	C
11268.0	7.7	323	4.5	76	8.8	9.4	C
11270.0	2.9	226	4.5	72	8.9	9.3	A
11272.0	3.7	240	4.5	70	8.9	9.5	A
11274.0	2.2	259	4.4	73	9.1	10.0	C
11276.0			4.4	78	9.0	9.9	
11278.0	5.5	220	4.3	81	8.9	9.5	A
11280.0	4.6	238	4.2	76	9.0	9.6	A
11282.0	1.2	228	4.2	71	9.1	10.0	A
11284.0	4.0	233	4.2	78	9.1	10.0	C
11286.0	4.8	234	4.2	83	9.1	9.9	A
11288.0	4.2	223	4.2	81	9.1	9.6	A
11290.0	4.2	216	4.4	81	9.0	9.3	A
11292.0	4.3	243	4.5	81	9.0	9.2	A
11294.0	3.8	238	4.3	84	9.0	9.0	A
11296.0	6.4	247	4.1	87	8.9	8.8	A
11298.0	3.7	269	4.1	88	8.8	8.8	A
11300.0	8.6	282	4.2	89	8.9	8.9	A
11302.0	9.7	278	4.3	90	8.9	8.9	A
11304.0	3.5	235	4.3	90	8.9	8.9	C
11306.0	3.7	244	4.4	89	8.9	8.9	A
11308.0	3.5	251	4.4	90	8.9	8.8	A
11310.0	4.9	260	4.4	91	8.8	8.8	A
11312.0	6.3	217	4.4	90	8.8	8.7	C
11314.0	5.1	229	4.4	88	8.8	8.7	A
11316.0	6.1	240	4.4	88	8.8	8.7	A
11318.0	5.7	252	4.4	88	8.9	8.7	A
11320.0	4.1	242	4.4	86	8.9	8.8	A
11322.0	4.0	247	4.4	85	8.9	8.8	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
11324.0	5.9	247	4.3	85	8.9	8.8	A
11326.0	3.5	235	4.3	84	8.9	8.9	A
11328.0	2.5	184	4.3	81	8.9	8.9	A
11330.0	4.5	237	4.3	80	8.9	8.9	A
11332.0	4.4	231	4.3	80	8.9	8.9	A
11334.0	4.2	221	4.3	80	8.8	8.8	A
11336.0	3.8	227	4.3	81	8.8	8.8	A
11338.0	4.3	232	4.3	81	8.8	8.8	A
11340.0	4.7	235	4.3	80	8.8	8.8	A
11342.0	4.2	235	4.3	81	8.8	8.9	A
11344.0	4.1	241	4.4	82	8.8	8.8	A
11346.0	3.6	248	4.5	84	8.8	8.9	A
11348.0	5.1	225	4.6	85	8.8	8.9	A
11350.0	5.6	231	4.6	85	8.8	8.9	A
11352.0	5.9	241	4.7	85	8.7	8.9	A
11354.0	6.0	247	4.8	83	8.7	8.9	A
11356.0	5.9	244	4.9	84	8.7	8.8	A
11358.0	5.4	242	5.0	86	8.6	8.7	A
11360.0	5.1	241	5.0	87	8.6	8.9	A
11362.0	4.9	246	5.0	87	8.6	9.0	A
11364.0	4.7	242	5.0	84	8.6	8.8	A
11366.0	4.5	237	5.1	84	8.6	8.8	A
11368.0	3.1	222	5.1	86	8.6	8.8	C
11370.0	5.1	231	5.1	88	8.6	8.8	C
11372.0	4.5	230	5.0	88	8.6	8.7	A
11374.0	3.9	226	5.0	88	8.6	8.7	A
11376.0	4.8	236	4.9	88	8.6	8.7	A
11378.0	5.3	238	4.9	89	8.5	8.7	A
11380.0	3.8	252	4.8	88	8.5	8.6	C
11382.0	4.3	249	4.8	87	8.3	8.5	C
11384.0	5.3	231	4.8	89	8.4	8.4	A
11386.0	4.4	240	4.7	90	8.4	8.5	A
11388.0	4.0	241	4.6	91	8.5	8.5	A

HAMILTON BROTHERS FISHLAKE FEDERAL 1-1 SUMMARY

DEPTH	DIP	DIP AZM	DEV	DEV AZM	DIAM 1-3	DIAM 2-4	QUAL
TOP							
5482.0	10.8	292.	1.2	136.	9.7	12.2	*
BOTTOM							
11382.0	5.1	245.	4.6	91.	8.5	8.6	A
TOP							
11084.0	5.2	340.	3.4	78.	9.3	9.3	*
BOTTOM							
11388.0	4.0	241.	4.6	91.	8.5	8.5	A

0.00	0.00	0.00	0.00	0.00	0.00	0.00