

FILE NOTATIONS

Entered in NID File ✓
Location Map Pinned ✓
Card Indexed ✓

Checked by Chief *AMB*
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed
..... WW..... TA.....
..... OS..... PA.....

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Miller's Log.....
Elect. Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
MIG Sonic GR..... Lat..... MI-L..... Sonic.....
CBLog..... CCLog..... Others.....

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO. U-8917	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME Tabby Canyon	
8. FARM OR LEASE NAME Tabby Canyon Unit	
9. WELL NO. 1	
10. FIELD AND POOL, OR WILDCAT Wildcat	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T6S, R6W, USM	
12. COUNTY OR PARISH Duchesne	13. STATE Utah

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Brinkerhoff Drilling Company, Inc.

3. ADDRESS OF OPERATOR
870 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface: **660' FSL, 660' FVL (C SW/4SW/4, Sec. 15)**
 At proposed prod. zone: *ASWSW*

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) **660'**

16. NO. OF ACRES IN LEASE **1880**

17. NO. OF ACRES ASSIGNED TO THIS WELL **1880**

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

19. PROPOSED DEPTH **8000'**

20. ROTARY OR CABLE TOOLS **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.) **Estimated 8800'** *WASATCH*

22. APPROX. DATE WORK WILL START*

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"	48#	500	200 Sx
8-3/4"	7"	23#	8000	350 Sx

We propose to drill a 17-1/2" surface hole to approximately 500 feet and run 13-3/8" casing cemented to surface. We propose to drill a 8-3/4" hole to a depth sufficient to adequately test the Wasatch formation at an estimated depth of 8000'. All significant shows of oil and/or gas will be cored or tested in accordance with good oilfield practice. The following electric logs will be run to total depth: IES, Sonic Gamma Ray, Gamma Ray Density, Proximity M-L and Dipmeter. If commercial production is obtained, 7" casing will be set and perforated through the pay zone. If well is dry, it will be plugged according to USGS instructions.

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 *[Signature]* TITLE **Vice President** DATE **November 9, 1970**

(This space for Federal or State office use)

PERMIT NO. **13-013-30053** APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

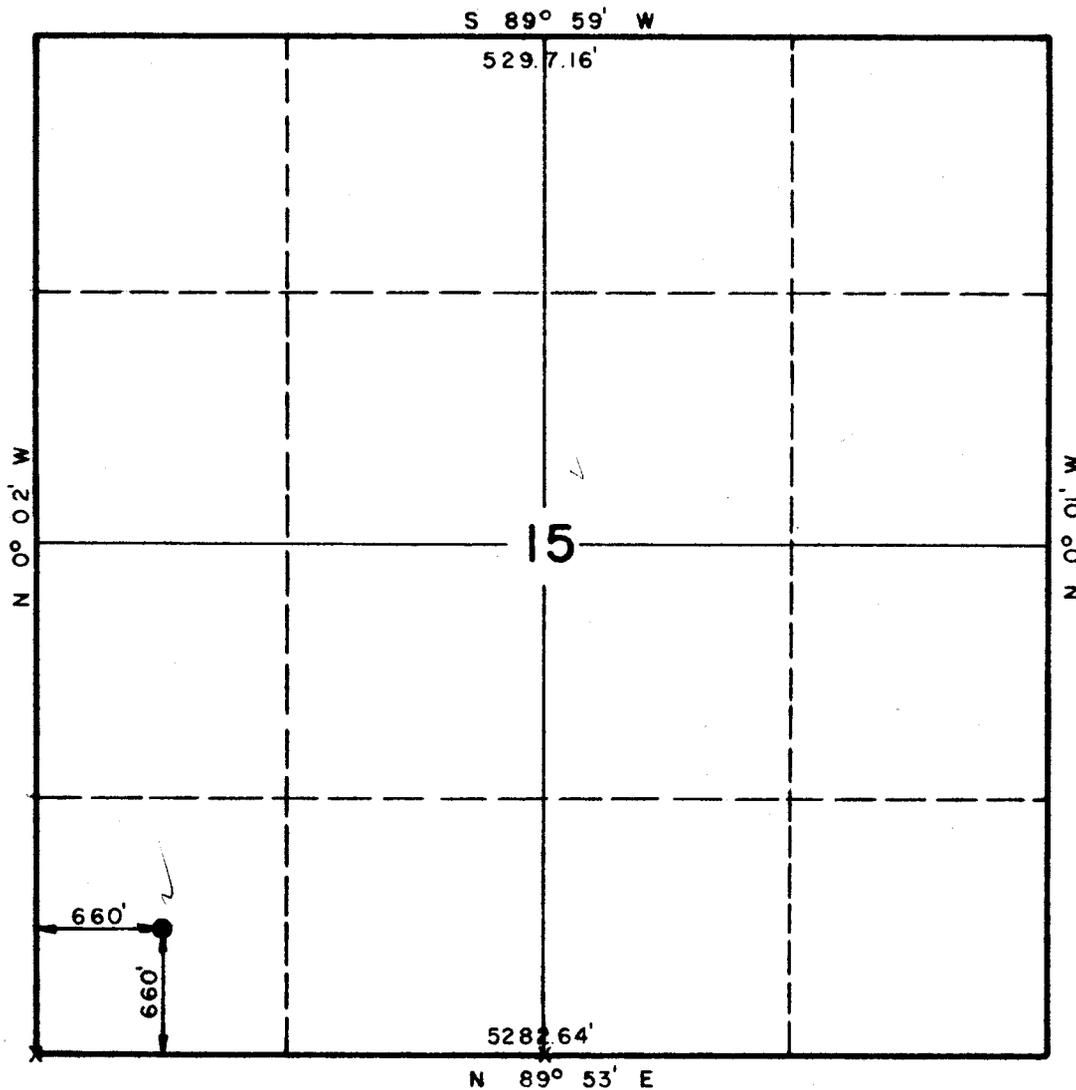
CONDITIONS OF APPROVAL, IF ANY:

T6S, R6W, U.S.B.&M.

PROJECT

BRINKERHOFF DRILLING CO.

Well Location, Located as shown
in the SW1/4 SW1/4 Sec. 15
T6S, R6W, U.S.B.&M. Duchesne
County, Utah.



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

Gene Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

X = Cor. Located (stone)

UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 26 Aug. 1970.
PARTY G.S. K.M.	REFERENCES GLO Plat
WEATHER Fair - Hot	FILE BRINKERHOFF DRILLING

SUPERVISOR, OIL AND GAS OPERATIONS:

DESIGNATION OF OPERATOR

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

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL No.: U-8917

and hereby designates

NAME: Brinkerhoff Drilling Company
ADDRESS: 870 Denver Club Building
Denver, Colorado 80202

as his operator and 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 Oil and Gas Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 6 South, Range 6 West, Uintah Mer.
Section 15: $W\frac{1}{2}NE\frac{1}{4}$, $SE\frac{1}{4}NE\frac{1}{4}$, $W\frac{1}{2}$, $SE\frac{1}{4}$

Duchesne 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 Oil and Gas 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 oil and gas supervisor of any change in the designated operator.

KING RESOURCES COMPANY

Lewis R. McCann
.....
(Signature of lessee)

Lewis R. McCann, Attorney-in-Fact
600 Denver Club Building
Denver, Colorado 80202

.....
(Address)

October 16, 1970

.....
(Date)

U. S. GOVERNMENT PRINTING OFFICE 16-53508-2

POWER OF ATTORNEY IS FILED IN
SERIAL NO. U-6142200 AND
IS STILL IN EFFECT.

24

738 - 2625

1/23/70

Dadson

25
30
75.0

Dick Miller

July Canyon #1 - Brunkenhoff 340
T.D. 6936 (8 3/4" hole)

Wazath - 5995' → no sand to T.D.

(1) 25 st at 5995' ≈ 75 to 100'

(2) Greenawald (top behind casing set @ 505)

4620 - 4640 - sh hor

me 35 st across interval

↓ significant
no 100' shale
but would be
included being plug

(3) 3000' = bad fresh water sand (15' thick)

95 st across the sand.

(4) surface plug @ 505 (13 3/8")
50 st

(5) surface = 25 st / marker / sand
between plug.

PMB

I gave OK - Operator Caldwell contacted
(promised to call Jerry Daniels) U.S.G.S.

November 9, 1970

United States Geological Survey
District Office
Federal Building
Salt Lake City, Utah

Attention: Mr. Gerald Daniels

Re: Tabby Canyon Unit Well No. 1
SW/4SW/4, Sec. 15, T6S, R6W, USM
Duchesne County, Utah

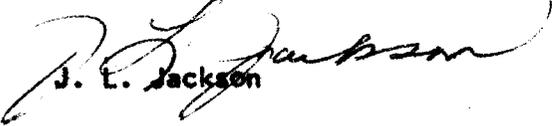
Gentlemen:

Referring to our telephone conversation this date we enclose Application For Permit To Drill in triplicate pertaining to the above referenced well. Also enclosed is a copy of the survey plat and Designation of Operator in triplicate from King Resources Company.

The ground elevation will be run as soon as the location is leveled and this information will be furnished you at a later date. We expect to commence operations as soon as the roads and location are completed. As previously stated the roads and location are on forest lands and we have obtained a special use permit from the Forest Supervisor, Ashley National Forest, Duchesne, Utah. We will cooperate fully with this office in all matters in which they have jurisdiction.

Yours very truly,

BRINKERHOFF DRILLING COMPANY, INC.


J. L. Jackson

JLJ:jh
Enclosures

✓ CC: State of Utah Oil and Gas Conservation Commission W/Two copies of Notice of Intention to Drill, Copy of Survey Plat and copy of Designation of Operator
348 E. S. Temple
Salt Lake City, Utah

C
O
P
Y

November 13, 1970

Brinkerhoff Drilling Company
870 Denver Club Building
Denver, Colorado 80202

Re: Tabby Canyon Unit 1
Sec. 15, T. 6 S, R. 6 W,
Duchesne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted.

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

PAUL W. BURCHELL-Chief Petroleum Engineer
HOME: 277-2890
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your co-operation with regard to completing this form will be greatly appreciated.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

DWB

Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah, 84111

November 16, 1970

Brinkerhoff Drilling Company
870 Denver Club Building
Denver, Colorado 80202

Re: Well No. 1 Tabby Canyon Unit (Proposed)
SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T 6 S, R 6 W, USM
Uintah County, Utah
Lease Utah 8917

Gentlemen:

Enclosed is your copy of the Application for Permit to Drill the referenced well which was approved by this office on November 13, 1970.

I assume that you had planned to use blow out preventers while drilling the well but they were not mentioned in your application. In any case, you should use a double ram type preventer, closing the pipe rams at least once every 24 hours and the blind rams each time the pipe is out of the hole. Both rams should be pressure tested before drilling out from under the surface casing. It is preferable to use a bag type preventer in conjunction with the double ram type.

Sincerely yours,

(ERIC. 800) 11/16/70

Gerald R. Daniels,
District Engineer

Attachment

cc: Casper
Utah Div. of Oil & Gas Conservation ✓

COMPLETION REPORT

BRINKERHOFF DRILLING COMPANY

No. 1 Tabby Canyon Unit
SW SW Section 15, Township 6 South, Range 6 West
Duchesne County, Utah

RICHARD B. OLESON
Consulting Geologist
530 Midland Savings Building
Denver, Colorado 80202

OPERATOR: Brinkerhoff Drilling Company, Inc.
WELL: No. 1 Tabby Canyon Unit
LOCATION: C - SW SW Section 15, Township 6 South, Range 6 West
COUNTY: Duchesne
STATE: Utah
AREA: Tabby Canyon
ELEVATION: 8880' Ground; 8892 K.B.
CONTRACTOR: Brinkerhoff Drilling Company
Denver, Colorado
Pusher: Dick Miller
Rig No.: 37
Type: National 50 - A
Derrick: L.C. Moore
Pipe: 4-1/2" X Hole
Collars: 6-1/4" O.D. (21)
COMMENCED: November 23, 1970
SURFACE PIPE: Set 505' of 13-3/8" casing with 625 sacks of cement
DRILLING FLUID: Dresser - Magcobar (Chem-Gel)
SAMPLES: 30' samples surface - 3000'
10' samples 3000' - Total Depth
Stored with American Stratigraphic Company
Casper, Wyoming
GEOLOGIST: Richard B. Oleson, Denver, Colorado
MUD LOGGING CO.: Monitor Inc., Denver, Colorado
(Loggers Bill Small, John Sheehan and Bill Hugo)
CORES: No cores taken.
DRILL STEM TESTS: No tests run.
LOGGING: Schlumberger, Vernal, Utah
Dual Induction; Compensated Formation Density;
and Borehole Compensated Sonic Log with Gamma Ray.
TOTAL DEPTH: 6946 Driller (10' fill up); 6936 Logger
STATUS: Plugged and Abandoned
COMPLETED DRILLING: January 21, 1971

WELL HISTORY

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
11-23-70		Set 7" conductor pipe at 20'. Should spud this A.M.
11-24-70	100'	Stuck drill pipe.
11-25-70	480'	Drilling.
11-26-70	1000'	Reaming @ 164'.
11-27-70		Reaming.
11-28-70		Trying to run surface casing.
11-29-70		Reaming.
11-30-70		Trying to run casing.
12-1-70	1000'	Ran 13-3/8" casing @ 505' K.B. with 625 sacks cement.
12-2-70	1245'	Drilling 8-3/4" hole.
12-3-70	1670'	Drilling. Lost circulation 1517'.
12-4-70	2202'	Losing circulation. Mixing lost circulation material. Lost circulation @ 2050' also.
12-5-70	2500'	Drilling.
12-6-70	2820'	Drilling.
12-7-70	2950'	Drilling.
12-8-70	3062'	Losing circulation. Mixing mud.
12-9-70	3266'	Losing circulation. Mixing mud.
12-10-70	3444'	Drilling. Lost circulation 3410'.
12-11-70	3550'	Drilling.
12-12-70	3707'	Stuck drill pipe.
12-13-70	3707'	Stuck.
12-14-70	3893'	Trip for new bit.
12-15-70	4144'	Surveys indicate crooked hole. Prepare plug back.
12-24-70	4220'	Drilling.
12-25-70	4328'	Drilling.
12-26-70	4609'	Drilling.
12-27-70	4781'	Drilling.
12-28-70	4931'	Drilling.
12-29-70	5300'	Drilling.
12-30-70	5514'	Drilling. (Lost circulation 5401').
12-31-70	5657'	Drilling.
1-1-71	5885'	Drilling.
1-2-71	6050'	Drilling.
1-3-71	6151'	Trip. (Lost circulation 6129').
1-4-71	6271'	Drilling.
1-5-71	6434'	Drilling.
1-6-71	6606'	Drilling.
1-7-71	6703'	Drilling. (Lost circulation 6680').
1-8-71	6808'	Stuck drill pipe.
1-18-71	6844'	Drilling.
1-19-71	6930'	Cementing lost circulation zone.
1-20-71	6930'	
1-21-71	6946'	Drilling. Had no returns since 6900'. Prepare drill with areated mud.
1-22-71	6946'	Running Schlumberger logs. Should complete at 9:00 A.M. Total Depth 6936'.
1-23-71	6946'	Prepare to plug and abandon as soon as receive approval.

STRAIGHT HOLE TESTS

<u>Date</u>	<u>Depth</u>	<u>Deviation</u>
11-23-70	90	1/2°
11-23-70	208	3/4°
11-24-70	294	3/4°
11-25-70	375	1°
11-25-70	550	1-1/2°
11-25-70	675	1-3/4°
11-25-70	?	2-1/4°
11-26-70	928	2-1/2°
11-27-70	980	2-1/2°
12-2-70	1100	3°
12-2-70	1230	2-1/2°
12-3-70	1612	3°
12-4-70	2106	3-1/4°
12-5-70	2630	5°
12-6-70	2720	6°
12-6-70	2818	6°
12-6-70	2892	6-1/2°
12-7-70	2961	6-1/4°
12-8-70	3085	3-1/4°
12-9-70	3235	6°
12-9-70	3330	4°
12-10-70	3470	3-1/2°
12-14-70	3935	4-1/4°
12-15-70	4087	14°
12-15-70	3650	6-1/2°
12-15-70	3743	8-3/4°
12-15-70	3863	10-1/2°
12-15-70	3929	12-1/4°
12-15-70	4022	14°
12-15-70	4115	14+°
12-15-70	4120	14°
12-15-70	3550	4°
12-18-70	3480	3-1/2°
12-19-70	3573	4-3/4°
12-22-70	4168	16°
12-23-70	4225	16°
12-24-70	4298	15°
12-25-70	4397	15°
12-25-70	4485	14-1/4°
12-26-70	4542	12-1/4°
12-26-70	4572	14°
12-26-70	4700	13-1/2°
12-27-70	4039	12°
12-29-70	5220	9-1/2°
12-30-70	5593	8°
1-1-71	5900	7°
1-3-71	6122	7°
1-6-71	6620	6°

FORMATION TOPS

<u>Formation</u>	<u>Depth</u>	<u>Log Top</u>	<u>K.B. Datum</u>
Tertiary Green River	510		
Tertiary Wasatch	5995	5996	+ 2896

LOG CALCULATIONS

<u>Formation</u>	<u>Depth</u>	<u>Porosity</u>	<u>Water Saturation</u>
Green River	3540 - 3550	21%	75%
Green River	4160 - 4170	20%	50%
Green River	4618 - 4644	20%	80-90%
Green River	4700 - 4710	7%	100%
Green River	4900 - 4910	15%	100%
Green River	5380 - 5410	20%	80%
Green River	5540 - 5550	11%	100%
Green River	5576 - 5610	14%	100%

BIT RECORD

<u>No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Footage</u>
3	8-3/4	HTC	OSC3AJ	75
4	8-3/4	HTC	OAVJ	100
5	8-3/4	HTC	OAVJ	63
6	8-3/4	HTC	OSC3A	505
7	8-3/4	HTC	J44	1910
8	8-3/4	Security	S88	560
9	8-3/4	HTC	OWVJ	237
10	8-3/4	HTC	OSC1GJ	106
11	8-3/4	HTC	OSC1GJ	195
12	8-3/4	HTC	OSC1GJ	71
13	8-3/4	HTC	OSC1GJ	RR
14	8-3/4	HTC	OSC1GJ	RR
15	8-3/4	HTC	OSC1GJ	37
16	8-3/4	Smith	L4MJ	74
17	8-3/4	HTC	OSC1GJ3	102
18	8-3/4	HTC	OSC1GJ3	504
19	8-3/4	Smith	S3J	754
20	8-3/4	Security	S88	81
21	8-3/4	HTC	J44	477
22	8-3/4	Security	S88	489
23	8-3/4	Smith	4JS	176
24	8-3/4	Smith	4JS	132
25	8-3/4	Security	M4N	

GEOLOGICAL COMMENTS

The Brinkerhoff No. 1 Tabby Canyon Unit was plugged and abandoned at a total depth of 6946 feet in Wasatch red shale and red sandstone facies. Dead oil shows were encountered in several zones in the Green River sands and shales; however with not enough merit to recommend any formation tests. Numerous lost circulation zones were encountered in Green River and Wasatch sand and shale zones but no measurable amount of formation gas was detected.

Richard B. O'Connell



SAMPLE DESCRIPTION

DEPTH	LITHOLOGY
30'	80% Dark grey to black shale, trace light tan shale; 20% Dark grey very shaly sandstone, medium grained.
60'	80% Shale as above; 20% sandstone as above.
90'	80% Dark grey sandy shale; 20% sandstone as above.
120'	90% Shale as above; 10% sandstone as above.
150'	90% Shale as above; 10% sandstone as above.
180'	80% Shale as above; 20% sandstone as above.
210'	90% Shale as above; 10% sandstone as above.
230'	80% Shale as above; 20% sandstone as above.
260'	80% Shale as above; 20% sandstone as above.
290'	80% Shale as above; 20% sandstone as above.
320'	80% Shale as above; 20% sandstone as above.
350'	80% Shale as above; 20% sandstone as above.
380'	90% Shale as above, trace light tan shale; 10% sandstone as above.
420'	90% Shale as above; 10% sandstone as above.
450'	90% Dark grey to black shale with trace light tan shale; 10% sandstone, dark grey shaley.
480'	80% Shale as above; 20% sandstone as above.
510'	90% Shale as above; 10% sandstone as above.
540'	100% Light tan, brown calcareous shale with good oil odor, dull fluorescence, no cut.
570'	100% Shale as above.
600'	100% Light tan to light grey brown calcareous shale, good odor and fluorescence.
630'	100% Shale as above.
660'	100% Shale as above.
660-730'	SAMPLES MISSING
730-760'	100% Shale as above.
790'	100% Black shale.
820'	100% Black and light tan-brown shale.
850'	100% Shale as above.
880'	100% Black shale.
910'	100% Black and light tan-brown shale.
940'	100% Black shale.
970'	100% Black red dark brown light tan shale.
1030'	100% Black, tan-grey siliceous shale with calcite crystals, trace limestone, dull fluorescence, no cut, fair odor.
60'	100% Shale as above.
90'	100% Tan-brown siliceous shale, trace grey shale.
1120'	100% Shale as above.
50'	NO SAMPLE
80'	NO SAMPLE
1210'	NO SAMPLE
40'	100% Shale as above.
70'	100% Shale as above with trace white limestone and calcite crystals.
1310'	100% Shale as above.
30'	100% Shale as above.
60'	100% Light tan-brown calcareous and siliceous shale and dark grey calcareous shale, dull fluorescence, no cut.
90'	100% shale as above.

Depth	Lithology
1420'	80% Light tan calcareous shale, dull fluorescence; 20% white finely crystalline limestone.
50'	80% Shale as above; 20% limestone as above.
80'	100% Light tan calcareous shale, trace limestone.
1510'	100% Shale as above with calcite crystals.
1517'	LOST CIRCULATION.
1540'	NO SAMPLES.
1570'	100% Light tan calcareous shale with trace limestone and dolomite.
1600'	100% Shale as above; white dolomite contains biotite flakes.
1630'	80% Light tan calcareous shale with pyrite streaks; 20% white finely crystalline dolomite with biotite flakes.
60'	80% Shale as above; 20% dolomite as above.
90'	100% Light tan calcareous shale.
1720'	NO SAMPLES DUE TO LOST CIRCULATION MATERIAL.
50'	NO SAMPLES.
80'	NO SAMPLES.
1810'	70% Medium grey calcareous shale; 30% medium grey crypto-crystalline dolomite, pyritic.
40'	70% Shale as above; 30% dolomite as above.
70'	70% Shale as above; 30% dolomite as above.
1900'	40% Light tan calcareous shale; 60% light grey finely crystalline dolomite.
30'	80% Shale as above; 20% light tan dolomite finely crystalline.
60'	80% Shale as above; 20% dolomite as above.
90'	80% Shale as above; 20% dolomite as above.
2020'	30% Light tan calcareous shale; 70% light grey finely crystalline sucrosic dolomite.
50'	NO SAMPLE - LOST CIRCULATION.
80'	20% Brown calcareous shale; 80% dolomite as above.
2110'	20% Light tan calcareous shale; 80% white finely crystalline dolomite with biotite flakes.
40'	20% Shale as above; 80% white to light grey finely crystalline dolomite.
70'	20% Shale as above; 80% dolomite as above.
2200'	100% Light to medium grey dolomite with muscovite and biotite flakes (dirty appearance) LOST CIRCULATION.
30'	60% Light tan to dark grey calcareous shale; 40% white finely crystalline dolomite.
60'	70% Shale as above; 30% dolomite as above.
90'	60% Shale as above; 40% white finely crystalline to medium grey dirty dolomite.
2320'	80% Brown calcareous shale; 20% dolomite as above.
50'	80% Shale as above; 20% dolomite as above.
80'	80% Shale as above; 20% dolomite as above.
2410'	40% Light tan to brown calcareous shale; 60% dolomite as above.
40'	20% Shale as above; 80% dolomite as above.

Depth	Lithology
2470'	40% Light tan to brown calcareous shale; 60% medium grey dirty dolomite.
2500'	40% Light tan calcareous shale; 60% dolomite as above.
30'	70% Shale as above; 30% dolomite as above.
60'	80% Shale as above; 20% dolomite as above.
90'	80% Shale as above; 20% dolomite as above.
2620'	30% Light tan, medium grey calcareous shale; 20% white finely crystalline dolomite.
50'	80% Light grey calcareous shale; 20% dolomite as above.
80%	80% Light tan, brown, light grey calcareous shale; 20% dolomite as above.
2710'	90% Light brown calcareous shale; 10% dolomite as above.
40'	80% Shale as above; 20% dolomite as above.
70'	90% Brown calcareous pyritic shale; 10% dolomite as above.
2800'	80% Light to medium grey, light tan shale; 10% dolomite as above; 10% sandstone, white fine-grained, pyritic.
30'	20% Shale as above; 80% light tan to buff dolomite, hard, dense; 10% sandstone, light grey, fine-grained, hard; trace of conglomerate.
90'	NO SAMPLE - NB 2910'
2920'	60% Light tan to light grey shale; 40% light tan to buff dense dolomite.
50'	70% Light green, light tan shale; 30% dolomite as above.
80'	70% Shale as above; 30% dolomite as above; trace of sandstone.
3000'	60% Light green shale; 40% sandstone, white sub-angular grains, micaceous with calcareous cement.
10'	40% Shale as above; 40% dolomite, buff, dense; 20% sandstone as above.
20'	40% Shale as above; 40% dolomite as above; 20% sandstone as above.
30'	80% Shale as above; 20% dolomite as above.
40'	90% Shale as above; 10% dolomite as above.
50'	100% Light grey, light green, light tan shale.
60'	NO SAMPLE - LCST CIRCULATION.
70'	100% Tan, light green, brown shale.
80'	100% Shale as above; trace of sandstone.
90'	20% Shale as above; 80% light tan, dense limestone.
3100'	80% Brown, grey, light green shale; 20% limestone as above; trace of sandstone, white, fine-grained, glauconitic.
10'	70% Shale as above; 20% limestone as above, 10% sandstone as above.
20'	40% Grey, green, brown shale; 10% limestone as above; 50% sandstone, white, fine-grained.
30'	80% Light grey to light green shale; 20% limestone as above.
40'	90% Shale as above; 10% limestone as above.

Depth

Lithology

Depth	Lithology
3150'	40% Light grey to light green shale; 60% light tan dense limestone.
60'	40% Shale as above; 60% limestone as above.
70'	50% Shale as above; 50% limestone as above.
80'	50% Shale as above; 50% limestone as above.
90'	80% Shale as above; 20% limestone as above.
3200'	80% Shale as above; 20% limestone as above.
10'	60% Light grey to light green shale; 20% white to buff dense limestone; 20% white fine-grained sandstone.
20'	60% Shale as above; 30% limestone as above; 10% sandstone as above.
30'	60% Shale as above; 30% limestone as above; 10% sandstone as above.
40'	60% Shale as above; 40% limestone as above; trace of sandstone as above.
50'	20% Shale as above; 80% white to buff chalky dense limestone.
60'	20% Shale as above; 80% limestone as above.
70'	20% Shale as above; 80% limestone as above; trace of white finely grained sandstone.
80'	60% Shale as above; 40% limestone as above.
90'	30% Shale as above; 70% limestone as above.
3300'	40% Shale as above; 60% limestone as above, trace of sandstone.
10'	60% Light green shale; 40% limestone as above.
20'	60% Shale as above; 30% buff limestone, dense; 10% white finely grained micaceous sandstone.
30'	40% Shale as above; 50% limestone as above; 10% sandstone as above.
40'	60% Shale as above; 40% limestone as above; trace of fossiliferous limestone.
50'	60% Shale as above; 40% limestone as above; trace of fossiliferous limestone.
60'	60% Shale as above; 40% limestone as above; trace of fossiliferous limestone.
70'	30% Shale as above; 70% limestone as above; trace of dolomite.
80'	80% Shale as above; 20% limestone as above.
90'	60% Light grey to dark brown shale; 40% white to light grey dense limestone.
3400'	60% Shale as above; 40% limestone as above.
10'	NO SAMPLE - LOST CIRCULATION
20'	60% Light green to dark grey shale; 40% buff dense limestone; trace of sandstone.
30'	80% Shale as above; 20% limestone as above.
40'	90% Dark grey to brown, light green shale; 10% limestone as above.
50'	70% Shale as above; 30% limestone as above.
60'	70% Shale as above; 20% limestone as above; 10% white finegrained sandstone.
70'	80% Light to medium grey to black shale; 20% limestone as above, trace of dolomite.

Depth	Lithology
3480'	40% Light to medium grey-black shale; 40% buff dense limestone; 20% medium grey dense dolomite.
90'	40% Shale as above; 40% limestone as above; trace of fossiliferous limestone with dark brown dead oil type stain; 20% dolomite as above.
3500'	40% Shale as above; 40% limestone as above; 20% dolomite as above.
10'	60% Shale as above; 30% light tan fossiliferous limestone, trace of stain; 10% dolomite as above.
20'	45% Shale as above; 40% limestone as above; 20% dolomite as above.
30'	40% Medium grey-green calcareous shale; 50% buff limestone; 10% white fine-grained sandstone.
40'	20% Shale as above; 10% limestone as above; 70% white fine-grained sandstone with dark brown dead oil type stain, good dark brown cut, then no fluorescence (this sand when wet appears a light green cast with no show - when heated or cut a dark brown residue appears).
50'	20% Shale as above; trace of limestone; 80% sandstone as above.
60'	20% Shale as above; 20% limestone as above; 40% sandstone as above.
70'	80% Shale as above; 20% limestone as above; trace of sandstone as above.
80'	80% Dark grey - brown shale; 20% buff dense limestone.
90'	90% Shale as above; 10% limestone as above.
3600'	70% Shale as above; 30% limestone as above.
10'	NO SAMPLE - LOST CIRCULATION
20'	60% Shale as above; 40% limestone as above.
26'	60% Shale as above; 40% limestone as above.
	LOST CIRCULATION 3632'
40'	80% Shale as above; 20% limestone as above.
50'	70% Shale as above; 20% limestone as above; 10% light grey fine-grained sandstone.
60'	90% Dark grey - black shale; 10% limestone as above.
70'	100% Black shale.
80'	100% Black shale; trace sandstone.
90'	70% Black shale; 30% white fine-grained hard sandstone.
3700'	90% Shale as above; 10% sandstone as above.
10'	90% Shale as above; 10% sandstone as above.
20'	60% Shale as above; 40% white fine-grained sandstone, low permeability and porosity, no show.
30'	80% Shale as above; 20% sandstone as above.
40'	60% Shale as above; 40% sandstone as above.
50'	90% Shale as above; 10% sandstone as above.
60'	80% Shale as above; 20% sandstone as above.
70'	50% Shale as above; 50% white fine-grained sandstone, low permeability and porosity, no show.
80'	70% Black, dark grey, brown, green shale; 20% dense buff limestone; 10% white fine-grained sandstone, hard and tight.

Depth

Lithology

Depth	Lithology
3790'	90% Black, dark grey, brown, green shale; 10% dense buff limestone.
3800'	80% Shale as above; 10% limestone as above; 10% white fine-grained sandstone, hard and tight, no show.
10'	60% Shale as above; 10% limestone as above; 30% sandstone as above.
20'	30% Shale as above; 60% buff dense limestone; 30% white fine-grained sandstone, no show.
30'	30% Shale as above; 60% limestone as above; 30% sandstone as above.
40'	80% Shale as above; 10% limestone as above; 10% sandstone as above.
50'	70% Shale as above; 30% light grey, very finely grained, hard and tight sandstone.
60'	40% Shale as above; 60% white to light tan fine-grained sandstone (20% of sandstone has good stain, poor cut, no permeability or porosity - appears to be dead oil stain).
70'	20% Shale as above; 80% sandstone as above.
80'	40% Shale as above; 60% white sandstone, very finely-grained; trace brown fine-grained sandstone with dead oil stain.
90'	40% Shale as above; 60% dense buff limestone, no show; trace of sandstone as above.
3900'	60% Shale as above; 30% limestone as above; 10% sandstone as above.
10'	100% Shale as above.
20'	90% Light to medium grey shale; 10% white fine-grained sandstone, no show.
30'	90% Shale as above; 10% sandstone as above.
40'	90% Shale as above; 10% sandstone as above.
50'	80% Shale as above; 10% medium grey dense limestone; 10% sandstone as above.
60'	90% Medium to dark grey shale; 10% limestone as above.
70'	70% Shale as above; 30% sandstone, white, very fine-grained, pyritic, no show.
80'	70% Shale as above; 30% medium grey dense limestone.
90'	70% Shale as above; 20% limestone as above; 10% sandstone, white, fine-grained, no show.
4000'	60% Shale as above; 30% limestone as above; 10% sandstone as above.
10'	40% Shale as above; 60% white, fine-grained sandstone, no show.
20'	90% Shale as above; 10% sandstone as above.
30'	70% Shale as above; trace limestone, 30% white fine-grained micaceous sandstone, no show.
40'	60% Shale as above; 20% limestone, buff, dense, no show; 20% white fine-grained micaceous sandstone, no show.
50'	90% Shale as above; 10% limestone as above.
60'	100% Light to medium grey shale.
70'	80% Medium grey shale; 20% fossiliferous limestone, no show.
80'	60% Shale as above; 40% white fine-grained sandstone, low permeability and porosity.

Depth

Lithology

Depth	Lithology
4090'	90% Medium grey shale; 10% white fine-grained sandstone, low permeability and porosity.
4100'	70% Shale as above; 30% sandstone as above.
10'	60% Shale as above; 10% medium grey dense limestone, 30% white fine-grained sandstone, no show.
20'	100% Dark grey to black shale.
30'	70% Shale as above; 30% tan to buff dense limestone.
40'	60% Dark grey to black shale; 40% dark grey fossiliferous limestone.
50'	60% Shale as above; 40% limestone as above.
60'	70% Shale as above; 30% white fine-grained sandstone, no show.
70'	70% Shale as above; 30% sandstone, very finely-grained, white, poor permeability and porosity, (less than 5% brown sandstone has dead oil stain).
80'	70% Shale as above; 30% sandstone as above.
90'	80% Shale as above; 20% sandstone as above.
4200'	70% Shale as above; 30% sandstone, white, fine to medium grained, no show.
10'	70% Shale as above; 30% sandstone as above.
20'	90% Shale as above; 10% sandstone as above.
30'	60% Shale as above; 40% white, fine to medium grained sandstone, low permeability and porosity.
40'	60% Shale as above; 40% dark grey dense limestone.
50'	70% Shale as above; 30% sandstone, white, very fine-grained, no show.
60'	80% Dark grey shale; 20% white fine-grained sandstone.
70'	80% Shale as above; 20% sandstone as above.
80'	60% Shale as above; 40% sandstone as above.
90'	20% Shale as above; 80% sandstone, light tan, fine-grained, calcareous matrix, no cut or fluorescence, no show.
4300'	Trace of shale; 100% sandstone as above.
10'	60% Dark grey shale; 20% sandstone as above; 20% buff dense limestone, no show.
20'	60% Shale as above; 40% limestone as above.
30'	SAMPLE MISSING
40'	90% Shale (light grey when wet, dark grey when dry); 10% Sandstone, white fine-grained, no show.
50'	100% Shale as above (sample contaminated with lost circulation material).
60'	100% Shale as above.
70'	90% Shale as above; 10% white to light grey, very fine-grained sandstone, no show.
80'	60% Shale as above; 40% sandstone as above.
90'	80% Shale as above (sample contaminated with lost circulation material); 20% sandstone as above.
4400'	80% Shale as above (no contamination); 20% sandstone as above.
10'	80% Shale as above; 20% sandstone as above.
20'	90% Shale as above; 10% sandstone as above.
30'	70% Shale as above; 30% sandstone, light grey, very fine-grained, no show.
40'	90% Shale as above; 10% sandstone as above.

Depth

Lithology

4450'	100%	Shale, light to medium grey, calcareous.
60'	100%	Shale as above.
70'	70%	Shale as above; 30% white, fine-grained sandstone, no show.
80'	60%	Shale as above; 40% sandstone as above.
90'	80%	Shale as above; 20% sandstone as above.
4500'	60%	Shale as above; 40% sandstone as above.
10'	90%	Shale as above; 10% sandstone as above.
20'	60%	Shale as above; 30% sandstone as above; 10% limestone, dark grey dense, shaley.
30'	60%	Shale as above; 10% sandstone as above; 30% limestone, buff, dense.
40'	30%	Shale as above; 20% sandstone as above; 50% limestone as above.
50'	30%	Shale as above; 20% sandstone as above; 50% limestone as above.
60'	70%	Shale as above; 20% sandstone as above; 10% limestone as above.
70'	90%	Shale as above; 10% sandstone as above; trace of limestone.
80'	100%	Shale as above.
90'	100%	Shale as above.
4600'	80%	Shale as above; trace of sandstone; 20% buff, dense limestone.
10'	80%	Shale as above; 20% limestone as above.
20'	70%	Shale as above; 30% sandstone, white to light tan, fine-grained, poor permeability and porosity (less than 5% has fair dead oil type stain, poor cut, dull fluorescence).
30'	20%	Shale as above; 80% sandstone as above (40% has stain as above).
40'	20%	Shale as above; 80% sandstone as above.
50'	60%	Shale as above; 40% sandstone as above.
60'	90%	Shale as above; 10% sandstone as above.
70'	100%	Shale as above.
80'	70%	Shale as above; 30% buff dense limestone.
90'	60%	Shale as above; 20% limestone as above; 20% sandstone, white, fine-grained, no show.
4700'	70%	Shale as above; 20% limestone as above; 10% sandstone as above with trace containing dead oil.
10'	20%	Shale as above; 80% sandstone, white, very fine-grained, no show.
20'	40%	Shale as above; 20% limestone as above; 40% sandstone as above.
30'	20%	Shale as above; 60% limestone as above; 20% sandstone as above.
40'	100%	Dark grey to black to brown shale; trace of sandstone.
50'	30%	Shale as above; 20% limestone, buff, dense; 50% white, medium-grained sandstone.
60'	20%	Shale as above; 30% limestone as above; 50% sandstone as above.
70'	50%	Shale as above; 10% limestone as above; 40% sandstone as above.

Depth

Lithology

4780'	90%	Dark grey to black to brown shale; 10% white, medium-grained sandstone.
90'	60%	Shale as above; 10% limestone, buff, dense; 30% sandstone as above.
4800'	90%	Shale as above; 10% sandstone as above.
10'	100%	Black-dark grey-brown shale.
20'	60%	Shale as above; 40% white, very fine-grained sandstone, no show.
30'	50%	Shale as above; 30% limestone, light grey, dense, finely crystalline; 20% sandstone as above.
40'	30%	Shale, light tan, light grey to dark brown to red; 40% limestone, light grey, finely crystalline; 30% sandstone as above.
50'	30%	Shale as above; 10% limestone as above; 60% sandstone as above.
60'	30%	Shale as above; 20% limestone as above; 50% sandstone as above.
70'	80%	Shale as above; 20% sandstone as above.
80'	80%	Shale as above; 20% limestone, light grey, crystalline; trace of sandstone as above.
90'	100%	Shale as above; trace of limestone as above; trace of sandstone as above.
4900'	60%	Shale as above; 40% sandstone, medium grey to brown, dirty, fine-grained, no show.
10'	20%	Shale as above; 80% sandstone as above.
20'	10%	Shale as above; 90% sandstone as above.
30'	80%	Shale as above; 20% sandstone as above.
40'	80%	Shale as above; 20% sandstone as above.
50'	70%	Shale as above; 30% white, very fine-grained, sandstone, no show.
60'	60%	Shale as above; 40% sandstone as above.
70'	70%	Shale as above; 20% sandstone as above; 10% limestone, light grey, finely crystalline.
80'	80%	Shale as above; 10% sandstone as above; 10% limestone as above.
90'	80%	Shale as above; 20% sandstone as above.
5000'	70%	Shale as above; 30% sandstone as above.
10'	50%	Shale as above; 50% sandstone, white, fine-grained, no show.
20'	40%	Shale as above; 50% sandstone as above; 10% limestone, fossiliferous, no show, (black ostracods).
30'	40%	Shale as above; 40% sandstone as above; 20% limestone as above.
40'	100%	Dark brown to maroon shale.
50'	100%	Shale as above.
60'	100%	Shale as above.
70'	100%	Shale as above.
80'	100%	Shale as above.
90'	100%	Shale as above.
5100'	100%	Shale as above.
10'	100%	Shale as above.

Depth

Lithology

Depth	Lithology
5120'	90% Dark brown to maroon shale; 10% white sandstone, very fine-grained, no show.
30'	80% Shale as above; 10% grey limestone, finely crystalline; 10% sandstone as above.
40'	70% Shale as above; 10% limestone as above; 20% sandstone as above.
50'	80% Shale as above; 10% limestone as above; 10% sandstone as above.
60'	80% Shale as above; trace of limestone; 20% sandstone as above.
70'	90% Shale as above; 10% sandstone as above.
80'	100% Shale as above.
90'	100% Shale as above.
5200'	70% Shale as above; 30% sandstone, light tan to medium brown, dirty, silty, no show.
10'	60% Shale as above; 40% sandstone as above.
20'	70% Shale as above; 30% sandstone as above.
30'	100% Shale as above with slight odor, dull fluorescence, no cut.
40'	100% Shale as above.
50'	100% Shale as above.
60'	100% Shale as above.
70'	100% Shale as above.
80'	100% Shale as above.
90'	100% Shale as above.
5300'	100% Shale as above.
10'	100% Shale as above.
20'	100% Shale as above.
30'	100% Shale as above.
40'	100% Shale as above.
50'	100% Shale as above.
60'	70% Shale as above; 30% white, medium-grained calcareous sandstone.
70'	60% Shale as above; 40% sandstone as above.
80'	60% Shale as above; 40% sandstone as above.
90'	10% Shale as above; 90% sandstone, very calcareous, fine-grained, no show.
5400'	NO SAMPLE - LOST CIRCULATION
10'	NO SAMPLE - LOST CIRCULATION
20'	80% Shale as above; 20% sandstone as above.
30'	70% Shale as above; 30% sandstone as above.
40'	70% Shale as above; 30% sandstone, fine to medium-grained, calcareous, no show.
50'	70% Shale as above; 30% sandstone, brown, dirty, silty.
60'	80% Shale as above; 20% sandstone as above.
70'	60% Shale as above; 40% sandstone as above with trace of brown medium-grained sandstone with dead oil stain.
80'	60% Shale as above; 40% sandstone as above.
90'	60% Shale as above; 40% sandstone, white, medium-grained, calcareous, no show.
5500'	90% Shale as above; 10% sandstone as above.
10'	80% Shale as above; 20% sandstone as above.

Depth

Lithology

Depth	Lithology
5520'	80% Dark brown to maroon shale; 20% sandstone, white, medium-grained, calcareous, no show.
30'	80% Shale as above; 20% sandstone as above.
40'	20% Shale as above; 80% sandstone, white, medium-grained, calcareous, very slight trace of stain, dull fluorescence, no gas.
50'	60% Shale, medium grey, brown, black; 40% sandstone as above.
60'	70% Shale as above; 30% sandstone as above with trace of brown silty sandstone.
70'	10% Shale as above; 90% sandstone, white, medium grey, calcareous, dull fluorescence, very slight stain, poor cut.
80'	30% Shale as above; 70% sandstone as above.
90'	10% Shale as above; 90% sandstone as above, very friable.
5600'	10% Shale as above; 90% sandstone as above.
10'	20% Shale as above; 80% sandstone as above.
20'	40% Shale as above; 60% sandstone as above.
30'	10% Shale as above; 90% sandstone, white, fine-grained, calcareous, no show.
40'	10% Shale as above; 90% sandstone as above.
50'	30% Shale as above; 70% sandstone as above.
60'	50% Shale as above; 50% sandstone as above.
70'	50% Shale as above; 50% sandstone as above.
80'	90% Shale as above; 10% sandstone as above.
90'	70% Dark grey to black shale; 20% sandstone as above; 10% fossiliferous limestone (ostracods).
5700'	80% Shale as above; 20% sandstone as above.
10'	80% Shale as above; 20% sandstone as above.
20'	80% Shale as above; 20% sandstone as above.
30'	80% Shale as above; 20% sandstone as above.
40'	90% Shale as above; 10% sandstone as above.
50'	70% Shale as above; 20% sandstone as above; 10% fossiliferous limestone (ostracods).
60'	80% Shale as above; 20% sandstone as above.
70'	90% Shale as above; 10% sandstone as above.
80'	80% Shale as above; 20% sandstone as above.
90'	80% Shale as above; 20% sandstone as above.
5800'	100% Dark grey to black shale, good fluorescence, good cut.
10'	100% Shale as above.
20'	100% Shale as above.
30'	100% Shale as above.
40'	100% Shale as above.
50'	100% Shale as above.
60'	100% Shale as above.
70'	100% Shale as above.
80'	100% Shale as above.
90'	100% Shale as above.
5900'	100% Shale as above.
10'	100% Shale as above.
20'	100% Shale as above; trace of light tan shale.
30'	100% Shale as above.

Depth

Lithology

5940'	100%	Dark grey to black shale, good fluorescence, good cut.
50'	100%	Shale as above.
60'	80%	Shale as above; 20% sandstone, white, fine to medium-grained, no show.
70'	80%	Shale as above; 20% sandstone as above.
80'	60%	Shale as above; 40% sandstone as above.
90'	60%	Shale as above; 40% sandstone as above.
6000'	40%	Red shale; 20% black shale; 40% sandstone as above.
10'	40%	Red shale; 20% black shale; 40% sandstone as above.
20'	40%	Red shale; 20% black shale; 20% sandstone as above.
30'	10%	Red shale; 40% black shale; 50% sandstone as above.
40'	20%	Red shale; 40% black shale; 40% sandstone as above.
50'	100%	Red silty shale.
60'	100%	Shale as above.
70'	80%	Red shale; 20% red sandstone.
80'	90%	Shale as above; 10% sandstone as above; trace of Anhydrite.
90'	100%	Red silty shale; trace of anhydrite.
6100'	80%	Red silty shale; trace of anhydrite; 20% white medium grained sandstone.
10'	80%	Dark brown to black shale; 20% sandstone as above; trace of anhydrite.
20'	80%	Red silty shale; 20% sandstone as above, trace of anhydrite.
30'	NO SAMPLES - LOST CIRCULATION	
40'	80%	Shale as above; 20% sandstone as above, trace of anhydrite.
50'	70%	Shale as above; 30% sandstone as above, trace of anhydrite.
60'	80%	Shale as above; 20% sandstone as above, trace of anhydrite.
70'	100%	Red shale, trace black shale, trace of anhydrite.
80'	60%	Shale as above; 40% sandstone as above, trace of anhydrite.
90'	70%	Shale as above; 30% sandstone as above, trace of anhydrite.
6200'	30%	Shale as above; 70% sandstone, white, medium-grained; trace of anhydrite.
10'	60%	Shale as above; 40% sandstone as above.
20'	60%	Shale as above; 40% sandstone as above; trace of anhydrite.
30'	60%	Shale as above; 40% sandstone as above; trace of anhydrite.
40'	80%	Shale as above; 20% red sandstone; trace of anhydrite.
50'	80%	Shale as above; 20% sandstone, white, medium-grained, no show; trace of anhydrite.
60'	90%	Shale as above; 10% sandstone as above; trace of anhydrite.
70'	90%	Red with brown and grey shale; 10% white medium-grained, glauconitic sandstone; trace of anhydrite.
80'	100%	Shale as above; traces of red and white sandstone and anhydrite.

Depth

Lithology

Depth	Lithology
6290'	100% Red with brown and grey shale; trace anhydrite.
6300'	100% Shale as above; trace of anhydrite; trace of sandstone.
10'	90% Red-brown shale; 10% red sandstone; trace anhydrite.
20'	70% Shale as above; 30% sandstone, pink to light red, fine-grained, shaley; trace anhydrite.
30'	70% Red shale; 30% red to pink sandstone, trace of anhydrite.
40'	NO SAMPLE
50'	80% Shale as above; 20% sandstone as above; trace of anhydrite.
60'	80% Shale as above; 20% sandstone as above; trace of anhydrite.
70'	70% Shale as above; 30% sandstone as above; trace of white sandstone and anhydrite.
80'	80% Shale as above; 20% sandstone as above; trace of anhydrite.
90'	100% Red shale; trace of anhydrite.
6400'	90% Red shale; 10% red sandstone, trace of anhydrite.
10'	60% Shale as above; 40% light red to pink sandstone; trace of anhydrite.
20'	70% Shale as above; 30% sandstone as above; trace of anhydrite.
30'	70% Shale as above; 30% sandstone as above; trace of anhydrite.
40'	100% Red silty, sandy shale; trace anhydrite.
50'	80% Shale as above; 20% red sandstone, trace anhydrite.
60'	90% Red shale; 10% red sandstone; trace anhydrite.
70'	100% Red shale; trace anhydrite.
80'	80% Red shale; trace anhydrite; 20% red sandstone.
90'	80% Red shale; 20% sandstone, red with traces of white, very fine-grained, no show; traces of anhydrite.
6500'	70% Red shale; 30% red to pink, fine to medium-grained, sandstone, no show; trace of anhydrite.
10'	90% Red shale; 10% red sandstone, trace of anhydrite.
20'	80% Red shale; 20% red sandstone, traces of white, fine-grained, no show; trace of anhydrite.
30'	80% Red shale; 20% white, fine-grained sandstone, no show; trace of anhydrite.
40'	80% Red shale; 20% red sandstone; trace of anhydrite.
50'	100% Red sandy shale; trace of anhydrite.
60'	90% Red sandy shale; 10% red sandstone; trace of anhydrite.
70'	70% Red shale; 30% red sandstone; trace anhydrite.
80'	90% Red shale; 10% red sandstone; trace anhydrite.
90'	80% Red shale; 20% red sandstone; trace anhydrite.
6600'	70% Red shale; 30% white to light grey, micaceous and glauconitic sandstone; trace anhydrite.
10'	90% Red shale; 10% sandstone as above; trace anhydrite.
20'	70% Red shale; 30% white to light pink, medium-grained sandstone; trace anhydrite.
30'	60% Red shale; 40% sandstone as above; trace anhydrite.
40'	90% Red, dark grey, black shale; 10% white, fine-grained sandstone, no show; trace anhydrite.
50'	100% Shale as above; trace anhydrite.

Depth

Lithology

6660'	100% Red, dark grey, black shale; trace anhydrite.
70'	100% Red sandy shale; trace anhydrite.
80'	NO SAMPLES - LOST CIRCULATION
90'	90% Red shale; 10% white, very fine-grained sandstone; trace anhydrite.
6700'	100% Red shale; trace of sandstone and anhydrite.
10'	90% Red shale; 10% white, fine-grained sandstone; trace anhydrite.
20'	90% Red shale; 10% red sandstone; trace anhydrite.
30'	100% Red shale; trace of sandstone and anhydrite.
40'	80% Red shale; 20% red sandstone with trace of white, fine-grained sandstone; trace of anhydrite.
50'	80% Red shale; 20% red sandstone; trace anhydrite.
60'	80% Red shale; 20% red sandstone; trace anhydrite.
70'	90% Red shale; 10% red sandstone with trace of white, fine-grained sandstone; trace anhydrite.
80'	90% Red shale; 10% red sandstone; trace anhydrite.
90'	60% Red shale; 40% red, fine-grained, shaley sandstone; trace anhydrite.
6800'	90% Red shale; 10% red sandstone; trace anhydrite.
10'	60% Red shale with trace of tan, brown shale; 40% white fine-grained sandstone; trace anhydrite.
20'	70% Red and black shale; 30% white, fine-grained sandstone; trace anhydrite.
30'	90% Red and black shale; 10% sandstone as above; trace anhydrite.
40'	80% Red shale; 20% red shaley sandstone; trace anhydrite.
50'	70% Red shale; 30% red sandstone; trace anhydrite.
60'	60% Red shale; 40% red sandstone; trace anhydrite.
70'	50% Red shale; 50% red, fine-grained sandstone with trace of white, fine-grained sandstone; trace of anhydrite.
80'	70% Red shale; 30% red sandstone; trace of anhydrite.
90'	70% Red shale; 30% red sandstone; trace of anhydrite.
6900'	80% Red shale with trace of black shale; 20% red sandstone; trace of anhydrite.
10'	NO SAMPLE - LOST CIRCULATION
20'	NO SAMPLE - LOST CIRCULATION
30'	NO SAMPLE - LOST CIRCULATION
40'	NO SAMPLE - LOST CIRCULATION

Total Depth 6946 feet

FORM OGC-8-X

FILE IN QUADRUPLICATE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Tabby Canyon Unit Well #1
Operator Brinkerhoff Drilling Company, Inc. Address 870 Denver Club Bldg.
Denver, Colo. 80202 Phone 222-9733
Contractor Brinkerhoff Drilling Company, Inc. Address 870 Denver Club Bldg.
Denver, Colo. 80202 Phone 222-9733
Location SW ¼ SW ¼ Sec. 15 T. 6 N R. 6 W Duchesne County, Utah

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1. <u>There were no fresh water sands encountered drilling this well.</u>			
2. _____			
3. _____			
4. _____			
5. _____			

(Continue on reverse side if necessary)

Formation Tops:

Green River 510'
Wasatch 5995'

Remarks:

- NOTE:
- (a) Upon diminishing supply forms, please inform this office.
 - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See Back of form).
 - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-8917

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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.)

7. UNIT AGREEMENT NAME

Tabby Canyon

8. FARM OR LEASE NAME

Tabby Canyon Unit

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 15, T6S, R6W, USM

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Brinkerhoff Drilling Company, Inc.

3. ADDRESS OF OPERATOR
870 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
660' FSL, 660' FWL (C SWSW)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
8892' KB

12. COUNTY OR PARISH

Duchesne

13. STATE

Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

This well was drilled to a total depth of 6946' driller and 6935' log and found to be non-productive. There were no cores or drillstem tests. Dual Induction-Laterolog, Compensated Formation Density and Borehole Compensated Sonic - Gamma Ray logs were run to total depth. Permission was obtained on 1/23/71 to plug as follows:

Plug #1	5990' - 6040'	25 Sx	Wasatch Formation
Plug #2	4600' - 4650'	25 Sx	Green River Formation
Plug #3	3000' - 3050'	25 Sx	Green River Formation
Plug #4	500' - 600'	50 Sx	Bottom of Surface casing
Plug #5	0' - 15'	15 Sx	Top of Surface Casing

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

SIGNED

[Signature]

TITLE

Vice President

DATE

April 7, 1971

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

31/34

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other

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

2. NAME OF OPERATOR
Brinkerhoff Drilling Company, Inc.

3. ADDRESS OF OPERATOR
870 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface **660' FSL, 660' FWL (C SWSW)**

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.

U-8917

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Tabby Canyon

8. FARM OR LEASE NAME

Tabby Canyon Unit

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 15, T6S, R6W, USM

12. COUNTY OR PARISH
Duchesne

13. STATE
Utah

15. DATE SPUNDED **11-23-70** 16. DATE T.D. REACHED **1-20-71** 17. DATE COMPL. (Ready to prod.) **P&A 1-24-71** 18. ELEVATIONS (DF, RKB, RT, GE, ETC.)* **8892' KB** 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD **6946' Driller 6935' Log** 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY **0-70** ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* **Dual** 25. WAS DIRECTIONAL SURVEY MADE **Yes**

26. TYPE ELECTRIC AND OTHER LOGS RUN **Schlumberger/Induction -Laterolog, Borehole Compensated Sonic-Gamma Ray and Compensated Formation Density Logs** 27. WAS WELL CORED **No**

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	505' KB	17-1/2"	625 5x	None

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	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

SIGNATURE **M. M. B...** TITLE **Vice President** DATE **April 7, 1971**

*(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 36.

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.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS								
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												
			<p>There were no cores or drillstem tests.</p> <p>See attached Completion Report prepared by Wellsite Geologist for formation tops, sample descriptions and general well history.</p>	<p>38.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">NAME</th> <th style="width: 50%;">TOP</th> </tr> </thead> <tbody> <tr> <td style="height: 50px;"></td> <td> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">MEAS. DEPTH</th> <th style="width: 50%;">TRUE VERT. DEPTH</th> </tr> </thead> <tbody> <tr> <td style="height: 50px;"></td> <td></td> </tr> </tbody> </table> </td> </tr> </tbody> </table>	NAME	TOP		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">MEAS. DEPTH</th> <th style="width: 50%;">TRUE VERT. DEPTH</th> </tr> </thead> <tbody> <tr> <td style="height: 50px;"></td> <td></td> </tr> </tbody> </table>	MEAS. DEPTH	TRUE VERT. DEPTH		
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