

FILE NOTATIONS

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

Checked by Chief ✓
Approval Letter 7-18-73 In Blue
Disapproval Letter

COMPLETION DATA:

Date Well Completed 10-2-73

Location Inspected

DW..... WW..... TA.....

Bond released

GW..... OS..... PA.....

State or Fee Land

LOGS FILED

Driller's Log..... ✓

Electric Logs (No.) ✓

E..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... MI-L..... Sonic.....

CBLog..... CCLog..... Others.....

[Handwritten initials]

INTEROFFICE COMMUNICATION

R. G. MYERS

FROM R. G. Myers

Rock Springs, Wyoming

CITY

STATE

TO B. W. Croft

DATE April 11, 1973

SUBJECT Tentative Plan to Drill
Unit Well No. 21
Clay Basin Field

Attached for your information and files is a tentative plan to drill the above-captioned well. This plan was written in accordance with the Geologic Prognosis dated January 30, 1973

RGM/gm

Attachment

- cc: J. T. Simon
- L. A. Hale (6)
- J. E. Adney
- Geology (2)
- D. E. Dallas (4)
- C. F. Rosene
- E. J. Widic
- B. M. Steigleder
- U.S.G.S.
- State *[Handwritten mark]*
- Paul Zubatch
- P. E. Files (4)

From: T. M. Colson

Rock Springs, Wyoming

To: R. G. Myers

March 6, 1973

Tentative Plan to Drill
Unit Well No. 21
Clay Basin Field

This well will be drilled to total depth by _____ Drilling Company. One work order has been originated for the drilling and completion of this well, namely 21332. This well is located in NE NE Sec. 29, T. 3 N., R. 24 E., Daggett County, Utah. This well will be drilled to a total depth of 5900 feet and 4-1/2-inch O.D. casing run. It is planned to complete the well as a gas producer from the Frontier formation. Five drill stem tests are anticipated.

1. Drill 13-3/4-inch hole to approximately 330 feet KBM.
2. Run and cement approximately 300 feet of 9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing. The casing will be cemented with 323 sacks of regular Type "G" cement, which represents theoretical requirements plus 100 per cent excess cement for 9-5/8-inch O.D. casing in 13-3/4-inch hole with cement returned to surface. Cement will be treated with 1518 pounds of Dowell D43A. Plan on leaving a 10-foot cement plug in the bottom of the casing after displacement is completed. Floating equipment will consist of a Baker guide shoe. The top and bottom of all casing collars will be spot welded in the field and the guide shoe will be spot welded to the shoe joint in the Rock Springs Machine Shop. The bottom of the surface casing should be landed in such a manner that the top of the 10-inch 3000 psi casing flange will be at ground level. A cellar three feet deep will be required. Prior to cementing, circulate 50 barrels of mud. Capacity of the 9-5/8-inch O.D. casing is 18 barrels.
3. After a WOC time of 6 hours, remove the landing joint and wash off casing collar. Install a NSCo. Type "B" 10-inch 3000 psi regular duty casing flange tapped for 9-5/8-inch O.D. casing. Install a 2-inch extra heavy nipple, 6 inches long, and a Nordstrom Figure 824 (800 psi WOG, 1600 psi test)

valve on one side outlet of the casing flange and a 2-inch extra heavy bull plug in the opposite side. Install a 10-inch 3000 psi double gate hydraulically operated blowout preventer with blind rams in the bottom and 4-1/2-inch rams in the top and finish nippling up. After a WOC time of 12 hours, pressure test surface casing, all preventer rams, and Kelly-cock to 1000 psi for 15 minutes using rig pump and drilling mud. The burst pressure rating for 9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing is 2270 psi.

4. Drill 7-7/8-inch hole to the total depth of 5900 feet or to such depth as the Geological Department may recommend. A mud de-sander will be used from under the surface casing to total depth to remove all undesirable solids from the mud system and to keep the mud weight to a minimum. A portable logging unit will be used from 4700 feet to total depth. A Company Geologist will be on location to check cutting samples; 10-foot samples from 4700 feet to total depth. The mud system will consist of properties adequate to allow the running of drill stem tests. The mud weight should be held as low as practical. Five drill stem tests are anticipated starting at a depth of approximately 5240 feet. Anticipated tops are as follows:

	<u>Approximate Depth</u> <u>(feet KBM)</u>
Mancos	Surface
Frontier	5240
Mowry	5440
Dakota	5640
Morrison	5760
Total Depth	5900

5. Run a dual induction-laterolog (linear 2-inch, logarithmic 5-inch with RXO/Rt on 5-inch) from total depth to the bottom of the surface pipe and compensated density gamma ray caliper log with "F" log overlay from total depth to 4400 feet.

6. Assume commercial quantities of gas and/or oil are present as indicated by open hole drill stem tests or log analysis. Go into hole with 7-7/8-inch bit and drill pipe to total depth to condition mud prior to running production casing. Pull bit laying down drill pipe and drill collars.
7. Run 4-1/2-inch O.D. casing as outlined in Item No. I, General Information, through the deepest producing zone as indicated by open hole drill stem tests or log analysis. A Baker 4-1/2-inch O.D., 8 round thread, Type G float collar and guide shoe will be run as floating equipment. Cement casing with 50-50 Pozmix "A" cement. Bring cement top behind the 4-1/2-inch O.D. casing above the uppermost producing zone as indicated by drill stem test and log analysis. Circulate 125 barrels of drilling mud prior to beginning cementing operations. Capacity of the 4-1/2-inch O.D. casing is approximately 87 barrels. Cement requirements will be based on actual hole size as determined by the caliper portion of the formation density log. Rotate casing while circulating, mixing and displacing cement. Displace cement with water.
8. Immediately after cementing operations are completed, land the 4-1/2-inch O.D. casing with full weight of casing on slips in the 10-inch 3000 psi casing flange and record indicator weight. Install NSCo. Type B 10-inch 3000 psi by 6-inch 5000 psi tubing spool. Pressure test primary and secondary seals to 3000 psi for 5 minutes. Minimum collapse pressure for 4-1/2-inch O.D., 11.6-pound, N-80, 8 round thread, IT&C casing is 5950 psi. Install a steel plate on the 6-inch 5000 psi tubing spool flange.
9. Release drilling rig and move off location.
10. Move in and rig up a completion rig.
11. Install a 6-inch 5000 psi hydraulically operated double gate preventer with blind rams on bottom and 2-3/8-inch tubing rams on top.

12. After a WOC time of at least 50 hours, rig up Dresser Atlas and run bond log and perforating formation control log from plugged back depth to top of cement behind the 4-1/2-inch O.D. casing.
13. After a WOC time of at least 56 hours, pick up and run a 3-3/4-inch bit on 2-3/8-inch O.D., 4.6-pound, J-55, seal lock thread tubing to check plugged back depth.
14. Using Halliburton pump truck and water, pressure test casing and tubing rams to 4500 psi for 15 minutes. The minimum internal yield for 4-1/2-inch O.D., 11.6-pound, N-80 casing is 7780 psi and the wellhead has a working pressure of 5000 psi with a test pressure of 10,000 psi. Pull tubing and pressure test casing and blind rams to 4500 psi for 15 minutes. Pull bit standing tubing in derrick.
15. A tentative plan to complete the well will be issued after results of the above items have been evaluated.

GENERAL INFORMATION

I. The following tubular goods have been assigned to the well.

<u>Description</u>	<u>Approximate Gross Measurement (feet)</u>	<u>Availability</u>
	<u>Surface Casing</u>	
9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing	330	Warehouse stock
	<u>Production Casing</u>	
4-1/2-inch O.D., 11.6-pound, N-80, 8 round thread, LT&C casing	6100	Warehouse stock
	<u>Production Tubing</u>	
2-3/8-inch O.D., 4.6-pound, J-55, seal lock tubing	6100	To be purchased

II. Well responsibility - J. A. Colburn

III. Hand wheels will be installed on all ram type preventers.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR
 P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 661' FSL, 649' FEL SE SE
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 26 miles east of Manila, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 649' / -
 16. NO. OF ACRES IN LEASE 760
 17. NO. OF ACRES ASSIGNED TO THIS WELL -

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1900' / Unit 14
 19. PROPOSED DEPTH 6150'
 20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 6343' (as graded)
 22. APPROX. DATE WORK WILL START* July 26, 1973

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4	9-5/8	32.3	300	323
7-7/8	4-1/2	11.6	to be	determined

We would like to drill the subject well to an estimated depth of 6150'; anticipated formation tops are as follows: Mancos at the surface, Frontier at 5510', Mowry at 5710', Dakota at 5880', and Morrison at 6030'.

Mud will be adequate to contain formation fluids and blow out preventers will be checked daily.

APPROVED BY DIVISION OF
OIL & GAS CONSERVATION

DATE 7-18-73

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 *[Signature]* TITLE Vice President, Gas Supply Operations DATE July 17, 1973

(This space for Federal or State office use)

PERMIT NO. 43-009-30011 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

July 13, 1973

DEVELOPMENT PLAN
FOR
U.S.G.S. APPROVAL
OF
SURFACE USE
MOUNTAIN FUEL DRILLING WELLS

Well Name Clay Basin Unit Well No. 2

Field or Area Clay Basin

1. Existing roads. - Refer to attached drawing No. M-9030.
2. Planned access roads. - Refer to attached drawing Nos. M-11199 and M-9030.
3. Location of wells. - Refer to attached drawing No. M-9030.
4. Lateral roads to well locations. - Refer to attached drawing No. M-9030.
5. Location of tank batteries and flowlines. - Refer to attached drawing No. M-9030.
6. Location and types of water supply. - Water will be hauled by tank truck from Red Creek. Refer to drawing No. M-9030.
7. Methods of handling waste disposal. - Refer to attached drawing No. M-11199 showing the location and size of the garbage and sump pits.
8. Location of camps. - Refer to attached drawing No. M-9030 for the location of Clay Basin camp.
9. Location of airstrips. - There is an existing airstrip in Clay Basin field. Refer to drawing No. M-9030 for location.
10. Location layout to include position of the rig, mud tanks, reserve pits, burn pits, pipe racks, etc. - Refer to attached drawing No. M-11199.
11. Plans for restoration of the surface. - After drilling operations, the well site will be cleared and cleaned and all sumps filled in. Should the well be a dry hole, the access road and well site will be abandoned and surfaces restored to the extent practicable and seeded. Should the well be a producer, areas of non-use will be restored and seeded.
12. Any other information which the Approving Official considers essential to his assessment of the impact on the environment. - The well site is located on a shallow depression on the side of a hill. The vegetation consists of sagebrush and range grass. On July 11, 1973, an on-site meeting was held with Mr. Dan Gardner of the Vernal District of the Bureau of Land Management. At that time, Mr. Gardner indicated approval of our proposed plan of surface development.

cc: P. Zubatch (4)
D. E. Dallas
A. A. Pentila
J. B. Carricaburu
Dan Gardner

Signed *K. A. Jaja*
Civil Engineering Supervisor

g
R. G. MYERS

INTEROFFICE COMMUNICATION

FROM R. G. Myers

Rock Springs, Wyoming

CITY

STATE

TO B. W. Croft

DATE July 18, 1973

SUBJECT Revised Tentative Plan to Drill
Unit Well No. 21
Clay Basin Field

Attached for your information and files is a revised tentative plan to drill the above-captioned well. This plan incorporates the location and depth change in accordance with the Geologic Prognosis dated July 3, 1973.

RGM/gm

Attachment

cc: J. T. Simon
L. A. Hale (6)
J. E. Adney
Geology (2)
D. E. Dallas (4)
C. F. Rosene
E. J. Widic
B. M. Steigleder
U.S.G.S.
State
Paul Zubatch
P. E. Files (4)

From: T. M. Colson

Rock Springs, Wyoming

To: R. G. Myers

July 18, 1973

Revised Tentative Plan to Drill
Unit Well No. 21
Clay Basin Field

This well will be drilled to total depth by _____ Drilling Company. One work order has been originated for the drilling and completion of this well, namely 21332. This well is located in the SE SE Sec. 19, T. 3 N., R. 24 E., Daggett County, Utah. This well will be drilled to a total depth of 6150 feet and 4-1/2-inch O.D. casing run. It is planned to complete the well in the Frontier and Dakota formations. Five drill stem tests are anticipated.

1. Drill 13-3/4-inch hole to approximately 330 feet KBM.
2. Run and cement approximately 300 feet of 9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing. The casing will be cemented with 323 sacks of regular Type "G" cement, which represents theoretical requirements plus 100 percent excess cement for 9-5/8-inch O.D. casing in 13-3/4-inch hole with cement returned to surface. Cement will be treated with 1518 pounds of Dowell D43A. Plan on leaving a 10-foot cement plug in the bottom of the casing after displacement is completed. Floating equipment will consist of a Baker guide shoe. The top and bottom of all casing collars will be spot welded in the field and the guide shoe will be spot welded to the shoe joint in the Rock Springs Machine Shop. The bottom of the surface casing should be landed in such a manner that the top of the 10-inch 3000 psi casing flange will be at ground level. A cellar three feet deep will be required. Prior to cementing, circulate 50 barrels of mud. Capacity of the 9-5/8-inch O.D. casing is 18 barrels.
3. After a WOC time of 6 hours, remove the landing joint and wash off casing collar. Install a NSCo. Type "B" 10-inch 3000 psi regular duty casing flange tapped for 9-5/8-inch O.D. casing. Install a 2-inch extra heavy nipple, 6-inches long, and a Nordstrom Figure 824 (800 psi WOG, 1600 psi test)

valve on one side outlet of the casing flange and a 2-inch extra heavy bull plug in the opposite side. Install a 10-inch 3000 psi double gate hydraulically operated blowout preventer with blind rams in the bottom and 4-1/2-inch rams in the top and finish nipling up. After a WOC time of 12 hours, pressure test surface casing, all preventer rams, and Kelly-cock to 1000 psi for 15 minutes using rig pump and drilling mud. The burst pressure rating for 9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing is 2270 psi.

4. Drill 7-7/8-inch hole to the total depth of 6150 feet or to such depth as the Geological Department may recommend. A mud de-sander will be used from under the surface casing to total depth to remove all undesirable solids from the mud system and to keep the mud weight to a minimum. A portable logging unit will be used from 5000 feet to total depth. A Company Geologist will be on location to check cutting samples; 10 foot samples from 5000 feet to total depth. The mud system will consist of properties adequate to allow the running of drill stem tests. The mud weight should be held as low as practical. Five drill stem tests are anticipated starting at a depth of approximately 5240 feet. Anticipated tops are as follows:

	<u>Approximate Depth</u> <u>(Feet KBM)</u>
Mancos	Surface
Frontier	5510
Mowry	5710
Dakota	5880
Morrison	6030
Total Depth	6150

5. Run a dual induction-laterolog (linear 2-inch, logarithmic 5-inch with RXO/Rt on 5-inch) from total depth to the bottom of the surface pipe and compensated density gamma ray caliper log with "F" log overlay from total depth to 4650 feet.

6. Assume commercial quantities of gas and/or oil are present as indicated by open hole drill stem tests or log analysis. Go into hole with 7-7/8-inch bit and drill pipe to total depth to condition mud prior to running production casing. Pull bit laying down drill pipe and drill collars.
7. Run 4-1/2-inch O.D. casing as outlined in Item No. I, General Information, through the deepest producing zone as indicated by open hole drill stem tests or log analysis. A Baker 4-1/2-inch O.D., 8 round thread, Type G float collar and guide shoe will be run as floating equipment. Cement casing with 50-50 Pozmix "A" cement. Bring cement top behind the 4-1/2-inch O.D. casing above the uppermost producing zone as indicated by drill stem test and log analysis. Circulate 125 barrels of drilling mud prior to beginning cementing operations. Capacity of the 4-1/2-inch O.D. casing is approximately 87 barrels. Cement requirements will be based on actual hole size as determined by the caliper portion of the formation density log. Rotate casing while circulating, mixing and displacing cement. Displace cement with water.
8. Immediately after cementing operations are completed, land the 4-1/2-inch O.D. casing with full weight of casing on slips in the 10-inch 3000 psi casing flange and record indicator weight. Install NSCo. Type B 10-inch 3000 psi by 6-inch 5000 psi tubing spool. Pressure test primary and secondary seals to 3000 psi for 5 minutes. Minimum collapse pressure for 4-1/2-inch O.D., 11.6-pound, N-80, 8 round thread, LT&C casing is 5950 psi. Install a steel plate on the 6-inch 5000 psi tubing spool flange.
9. Release drilling rig and move off location.
10. Move in and rig up a completion rig.
11. Install a 6-inch 5000 psi hydraulically operated double gate preventer with blind rams on bottom and 2-3/8-inch tubing rams on top.

12. After a WOC time of at least 50 hours, rig up Dresser Atlas and run bond log and perforating formation control log from plugged back depth to top of cement behind the 4-1/2-inch O.D. casing.
13. After a WOC time of at least 56 hours, pick up and run a 3-3/4-inch bit on 2-3/8-inch O.D., 4.6-pound, J-55, seal lock thread tubing to check plugged back depth.
14. Using Halliburton pump truck and water, pressure test casing and tubing rams to 4500 psi for 15 minutes. The minimum internal yield for 4-1/2-inch O.D., 11.6-pound, N-80 casing is 7780 psi and the wellhead has a working pressure of 5000 psi with a test pressure of 10,000 psi. Pull tubing and pressure test casing and blind rams to 4500 psi for 15 minutes. Pull bit standing tubing in derrick.
15. A tentative plan to complete the well will be issued after results of the above items have been evaluated.

GENERAL INFORMATION

I. The following tubular goods have been assigned to the well.

<u>Description</u>	<u>Approximate Gross Measurement (feet)</u>	<u>Availability</u>
	<u>Surface Casing</u>	
9-5/8-inch O.D., 32.3-pound, H-40, 8 round thread, ST&C casing	330	Warehouse stock
	<u>Production Casing</u>	
4-1/2-inch O.D., 11.6-pound, N-80, 8 round thread, LT&C casing	6,300	Warehouse stock
	<u>Production Tubing</u>	
2-3/8-inch O.D., 4.6-pound, J-55, seal lock tubing	6,300	To be purchased

II. Well responsibility - J. A. Colburn

III. Hand wheels will be installed on all ram type preventers.

SLC

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE _____
LEASE NUMBER Clay Basin
UNIT _____

01

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Daggett Field Clay Basin

The following is a correct report of operations and production (including drilling and producing wells) for the month of JUL 1973, 19 ,

Agent's address P. O. BOX 11368 Company MOUNTAIN FUEL SUPPLY COMPANY

SALT LAKE CITY, UTAH ~~84139~~ Signed D. Murphy

Phone 328-8315 Agent's title CHIEF ACCOUNTANT

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
SLC 062508 - Government Land Clay-Basin Unit #21										
SE SE 19	3N	24E	21							Spud July 26, 1973 2,975' Drilling

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;

No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

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.
SL - 062508

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.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME Clay Basin Unit
2. NAME OF OPERATOR Mountain Fuel Supply Company		8. FARM OR LEASE NAME Unit Well
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901		9. WELL NO. 21
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 661' FSL, 649' FEL SE SE		10. FIELD AND POOL, OR WILDCAT Clay Basin
14. PERMIT NO. 43-009-30011		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 19-3N-24E
15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 6354' GR 6343'		12. COUNTY OR PARISH Daggett
		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 <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u>	<input checked="" type="checkbox"/>

(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.)*

Depth 5540', drilling.

Spudded July 26, 1973.

Landed 307.81' net, 310.61' gross of 9-5/8"OD, 32.3#, H-40, 8rd thd, ST&C casing at 318.81' KBM and set with 323 sacks of cement, returned 30 barrels cement slurry to surface.

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

SIGNED BW Craft TITLE Vice President, Gas Supply Operations DATE August 7, 1973

(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 TRIPPLICATE*
(Other instructions reverse side)

Form approved.
Budget Bureau No. 42-R1424

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.)

<p>1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR <u>Mountain Fuel Supply Company</u></p> <p>3. ADDRESS OF OPERATOR <u>P. O. Box 1129, Rock Springs, Wyoming 82901</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <u>661' FSL, 649' FEL SE SE</u></p>	<p>5. LEASE DESIGNATION AND SERIAL NO. <u>SI-062508</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME -</p> <p>7. UNIT AGREEMENT NAME <u>Clay Basin Unit</u></p> <p>8. FARM OR LEASE NAME <u>Unit Well</u></p> <p>9. WELL NO. <u>21</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Clay Basin</u></p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>SE SE 19-3N-24E</u></p> <p>12. COUNTY OR PARISH <u>Daggett</u></p> <p>13. STATE <u>Utah</u></p>
<p>14. PERMIT NO. <u>43-009-3001</u></p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>KB 6354' GR 6343'</u></p>

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

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>		
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>		
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>		
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u> <input checked="" type="checkbox"/>			
(Other) <input type="checkbox"/>		(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.)*

Depth 6010', drilling.

- DST #1: 5535-5560', Frontier, IO 1/2 hr., ISI 1 1/2 hrs, FO 2 hrs, FSI 4 hrs, opened medium on both openings, no gas, recovered 120' mud. IHP 2741, IOFP's 65-65, ISIP 1145, FOFP's 43-65, FSIP 1209, FHP 2741.
- DST #2: 5583-5663', Frontier, IO 1/2 hr, ISI 1 1/2 hrs, FO 3 hrs, FSI 5 1/4 hrs, opened with medium blow, gas in 1/2 hr, reopened, gas at once, 1/2 hr 32 Mcf, 1 hr 44 Mcf, 1 1/2 hrs 44 Mcf, 2 hrs 56 Mcf, 3 hrs 60 Mcf, gas is combustible, recovered 230' mud. IHP 2837, IOFP's 132-132, ISIP 2360, FOFP's 110-132, FSIP 2403, FHP 2794.
- DST #3: 5864-5930', Dakota, IO 1/2 hr, ISI 1 1/2 hrs, FO 1 1/2 hrs, FSI 4 hrs, opened weak, continued throughout initial opening, no gas to surface, reopened weak, decreasing to very weak after 20 min, continued throughout, no gas to surface, recovered 60' mud. IHP 2911, IOFP's 43-65, ISIP 130, FOFP's 43-65, FSIP 217, FHP 2826.
- DST #4: 5860-5930', Dakota, IO 1/2 hr, ISI 1 1/2 hrs, FO 1 1/2 hrs, FSI 4 hrs, opened with weak blow, continued throughout, no gas to surface, reopened with no blow, same throughout, no gas to surface, recovered 60' mud. IHP 2883, IOFP's 46-46, ISIP 223, FOFP's 56-56, FSIP 251, FHP 2873.

- Continued on Reverse Side -

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

SIGNED BW Craft TITLE Vice President Gas Supply Operations DATE August 15, 1973

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-685229

847 - 485

DST #5: 5938-6005', Dakota, IO $\frac{1}{2}$ hr, ISI $1\frac{1}{2}$ hrs, FO 2 hrs, FSI 4 hrs, opened with strong blow to bottom of 5 gallon bucket, continued throughout, gas to surface in 14 minutes, not enough to gauge, reopened with strong blow, decreasing after 20 minutes, continued throughout, recovered 3020' water and 360' muddy water. IHP 2911, IOFP's 129-476, ISIP 2572, FOFP's 649-1465, FSIP 2529, FHP 2911.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-01424.

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.)

<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR Mountain Fuel Supply Company</p> <p>3. ADDRESS OF OPERATOR P.O. Box 1129, Rock Springs, Wyoming 82901</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 661' FSL, 649' FEL SE SE</p>	<p>5. LEASE DESIGNATION AND SERIAL NO. SL-062508</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME -</p> <p>7. UNIT AGREEMENT NAME Clay Basin Unit</p> <p>8. FARM OR LEASE NAME Unit Well</p> <p>9. WELL NO. 21</p> <p>10. FIELD AND POOL, OR WILDCAT Clay Basin</p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 19-3N-24E</p> <p>12. COUNTY OR PARISH Daggett</p> <p>13. STATE Utah</p>
<p>14. PERMIT NO. 43-009-3001</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 6354' GR 6343'</p>

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u> <input checked="" type="checkbox"/>	

(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 6040', rig released 8/16/73, set 4 1/2" OD casing at 5768.28' with 450 sacks cement.
Waiting on completion rig.

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

SIGNED B. D. Craft TITLE Vice President Gas Supply Operations DATE August 22, 1973

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

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.

SL-062508

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.)

1.

OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

661' FSL, 649' FEL SE SE

14. PERMIT NO.

43-009-3001

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

KB 6354' GR 6343'

7. UNIT AGREEMENT NAME

Clay Basin Unit

8. FARM OR LEASE NAME

Unit Well

9. WELL NO.

21

10. FIELD AND POOL, OR WILDCAT

Clay Basin

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

SE SE 19-3N-24E

12. COUNTY OR PARISH

Daggett

13. STATE

Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other) Supplementary history

(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 6040', ran cement bond PFC log from 5710-4000', tagged cement at 4165'.

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

SIGNED

B. A. Cray

TITLE

Vice President

Gas Supply Operations

DATE

August 29, 1973

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



AUG 13 1976

CHEM LAB

WATER ANALYSIS EXCHANGE REPORT

MEMBER Mountain Fuel Supply Company
 OPERATOR Mountain Fuel Supply Company
 WELL NO. Unit 21
 FIELD Clay Basin
 COUNTY Dagget
 STATE Utah

LAB NO. 10857-1 REPORT NO. _____
 LOCATION Sec. 19-3N-24E
 FORMATION Dakota
 INTERVAL 5944-6005
 SAMPLE FROM DST No. 5 (Bottom)
 DATE August 29, 1973

REMARKS & CONCLUSIONS: Cloudy water with cloudy filtrate.

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	25,499	1,109.20	Sulfate	1,140	23.71
Potassium	155	3.97	Chloride	48,000	1,353.60
Lithium	--	--	Carbonate	--	--
Calcium	3,920	195.61	Bicarbonate	317	5.20
Magnesium	897	73.73	Hydroxide	--	--
Iron	--	--	Hydrogen sulfide	--	--
Total Cations 1,382.51			Total Anions 1,382.51		

Total dissolved solids, mg/l 79,767
 NaCl equivalent, mg/l 79,828
 Observed pH 7.0

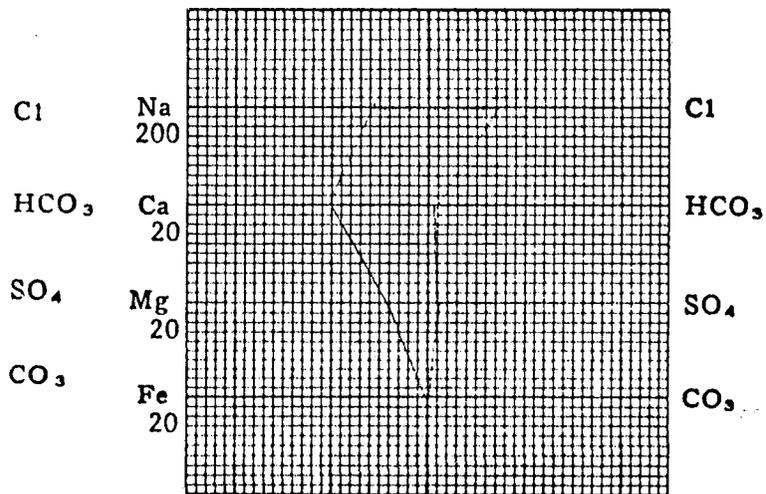
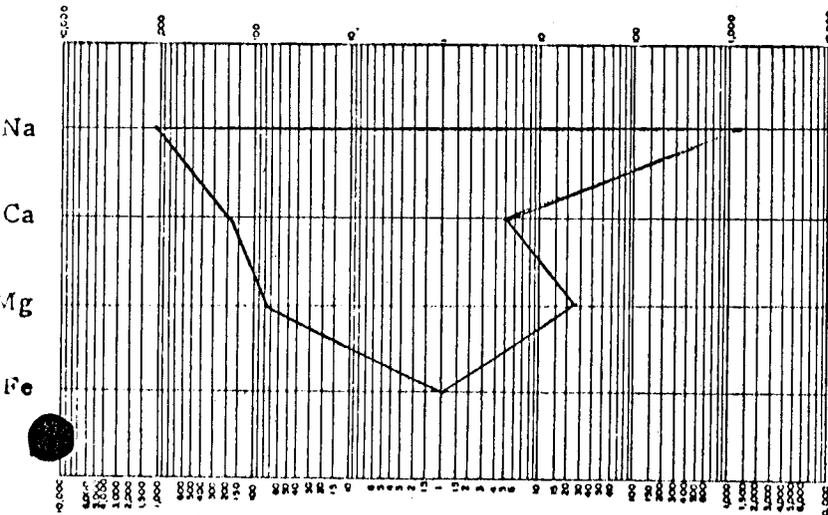
Specific resistance @ 68° F.:
 Observed 0.099 ohm-meters
 Calculated 0.098 ohm-meters

WATER ANALYSIS PATTERNS

MEQ per unit

LOGARITHMIC

STANDARD



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter. Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components



CHEM LAB

WATER ANALYSIS EXCHANGE REPORT

MEMBER Mountain Fuel Supply Company
 OPERATOR Mountain Fuel Supply Company
 WELL NO. Unit 21
 FIELD Clay Basin
 COUNTY Dagget
 STATE Utah

LAB NO. 10857-2 REPORT NO. _____
 LOCATION Sec. 19-3N-24E
 FORMATION Dakota
 INTERVAL 5944-6005
 SAMPLE FROM DST No. 5 (MFE)
 DATE August 29, 1973

REMARKS & CONCLUSIONS: Cloudy water with cloudy filtrate.

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	27,658	1,203.13	Sulfate	1,175	24.44
Potassium	172	4.40	Chloride	50,000	1,410.00
Lithium	--	--	Carbonate	--	--
Calcium	3,920	195.61	Bicarbonate	342	5.61
Magnesium	449	36.91	Hydroxide	--	--
Iron	--	--	Hydrogen sulfide	--	--
Total Cations		1,440.05	Total Anions		1,440.05

Total dissolved solids, mg/l 83,542
 NaCl equivalent, mg/l 83,132
 Observed pH 7.0

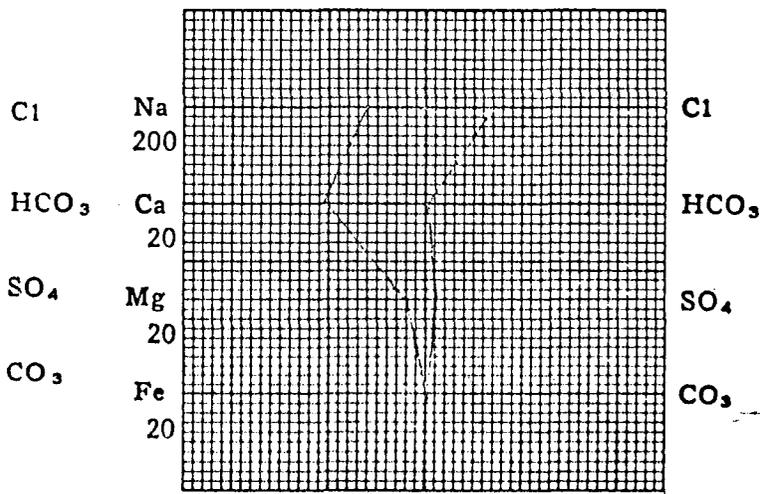
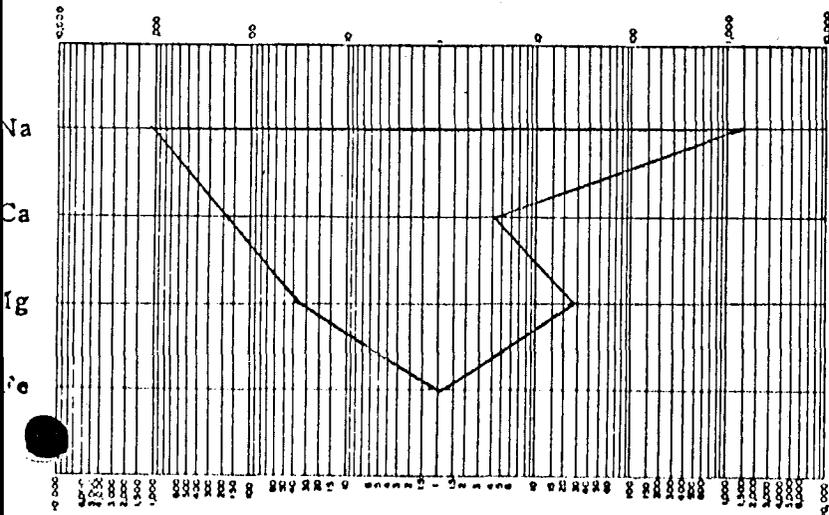
Specific resistance @ 68° F.:
 Observed 0.099 ohm-meters
 Calculated 0.094 ohm-meters

WATER ANALYSIS PATTERNS

MEQ per unit

LOGARITHMIC

STANDARD



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l=Milligrams per liter. Meq/l=Milligram equivalents per liter
 Sodium chloride equivalent=by Dunlap & Hawthorne calculation from components

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE SLC
LEASE NUMBER _____
UNIT Clay Basin

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Daggett Field Clay Basin

The following is a correct report of operations and production (including drilling and producing wells) for the month of AUG 1973, 19____,

Agent's address P. O. BOX 11368 Company MOUNTAIN FUEL SUPPLY COMPANY

SALT LAKE CITY, UTAH 84139 Signed [Signature]

Phone 328-8315 Agent's title CHIEF ACCOUNTANT

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
SLC 062508 - Government Land Clay Basin Unit #21										
SE SE 19	3N	24E	21							Spud July 26, 1973 TD 6,040' Shut In

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;

No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Handwritten initials

Handwritten mark

INTEROFFICE COMMUNICATION

R. G. MYERS

FROM R. G. Myers

Rock Springs, Wyoming
CITY STATE

TO B. W. Croft

DATE September 7, 1973

SUBJECT Tentative Plan to Complete
Unit Well No. 21
Clay Basin Field

Attached for your information and files is a tentative plan to complete the above-captioned well.

RGM/gm

Attachment

- cc: J. T. Simon
- L. A. Hale (6)
- J. E. Adney
- Geology (2)
- D. E. Dallas (4)
- C. F. Rosene
- E. J. Widic
- E. A. Farmer
- B. M. Steigleder
- U.S.G.S. *[Handwritten mark]*
- State
- P. E. Files (4)

From: W. A. Abbott

Rock Springs, Wyoming

To: R. G. Myers

September 7, 1973

Tentative Plan to Complete
Unit Well No. 21
Clay Basin Field

Present status of the well is as follows:

- a. 9-5/8-inch O.D., 32.3-pound, H-40, ST&C surface casing landed at 318.8 feet KBM. NSCo. 10-inch 3000 psi casing flange was installed.
- b. 4-1/2-inch O.D., 11.6-pound, N-80, 8 round thread, LT&C casing landed at 5768 feet KBM.
- c. The cement behind the 4-1/2-inch O.D. casing was in place at 4:00 P.M., August 16, 1973. Cement bond log run 8-25-73 indicates the cement top at 4168 feet.
- d. A 10-inch 3000 psi by 6-inch 5000 psi crossover tubing spool was installed and seals pressure tested to 2500 psi for five minutes. This leaves a 6-inch 5000 psi flange looking up.

A tentative plan to complete the well is as follows:

NOTE: KB is 9.31 feet above the 6-inch 5000 psi tubing spool.

1. Move in and rig up a contract workover rig.
2. After a WOC time of at least 50 hours, rig up Dresser Atlas and run a cement bond PFC log from plugged back depth at approximately 5732 feet KBM to top of cement behind 4-1/2-inch O.D. casing at approximately 4168 feet KBM.
3. Install a 6-inch 5000 psi double gate hydraulically operated blowout preventer with 2-3/8-inch rams in top and blind rams in bottom.
4. After a WOC time of at least 56 hours, run a 3-3/4-inch bit on 2-3/8-inch O.D., 4.6-pound, J-55 seal lock tubing to check plugged back depth at approximately 5732 feet KBM.
5. Using Halliburton pump truck, pressure test tubing rams and casing to 5000 psi for 15 minutes. The minimum internal yield for new 4-1/2-inch O.D., 11.6-pound,

N-80 casing is 7780 psi and the wellhead has a working pressure of 5000 psi with a test pressure of 10,000 psi. Land the tubing on the NSCo. Type H-1 tubing hanger and pressure test blind rams to 5000 psi for 15 minutes.

6. Displace the water out of the casing from plugged back depth to surface with drip oil treated with 50 pounds per 1000 gallons Adomite. Approximately 80 barrels will be required. Pull 2-3/8-inch O.D. tubing and stand in derrick.
7. Rig up Dresser-Atlas lubricator and perforate with two Golden Jet holes per foot as follows:

5542 feet - 5550 feet KBM
5576 feet - 5582 feet KBM
5603 feet - 5616 feet KBM

A total of 27 feet will be perforated with 54 holes. The above perforating depths are from the Dresser-Atlas Densilog dated August 15, 1973. Record any surface pressure.

8. Install a 6-inch, 3000 psi stripper head with 2-3/8-inch rubber. Run and land the 2-3/8-inch O.D. tubing at maximum depth of 5510 feet KBM as follows:

(Top of String)

1 NSCo. H-1 tubing hanger tapped for 2-3/8-inch O.D., 8 round thread, EUE tubing.

1 Baker 2-3/8-inch blast joint (2-3/8-inch, 8 round) approximately three feet long, pin end in hanger.

1 2-3/8-inch O.D., 8 round, EUE by 2-3/8-inch, seal lock change nipple.

Approximately 5500 feet of 2-3/8-inch O.D., 4.6-pound, J-55 seal lock tubing.

1 shop-made 2-3/8-inch seal lock combination closing tool and tubing shoe with aluminum plug.

9. Remove the BOP's and stripper head. Install the upper portion of the wellhead.
10. Rig up three HT-400 pump trucks and one pressurized blender in order to apply a My-T-oil treatment to the perforations by pumping down the 2-3/8-inch O.D. tubing and 2-3/8-inch O.D. tubing by 4-1/2-inch O.D. casing annulus

simultaneously. Install a pressure recorder on one of the discharge lines going to the casing. A fracometer will be used during the treatment. A Halliburton fire truck and mechanic will be on location. The annulus between the 9-5/8-inch O.D. casing and 4-1/2-inch O.D. casing should be open and observed during the fracturing operations.

11. Pressure test surface lines from pump trucks to wellhead to 7000 psig. Fill the 2-3/8-inch O.D. tubing and pump out the plug with gelled drip oil (40 pounds M033 per 1000 gallons drip oil) treated with 25 pounds per 1000 gallons Adomite Aqua. Approximately 25 barrels will be required. Using all pump trucks, pump 4000 gallons of gelled drip oil treated with 25 pounds per 1000 gallons Adomite Aqua in order to obtain a breakdown pressure and injection rate. During this time, observe all surface lines, connections, and wellhead for leaks. If the breakdown pressure is 5500 psig or less, proceed with the treatment.
12. Apply the My-T-oil treatment in the following manner: all gelled drip oil used to frac will be treated with 25 pounds Adomite Aqua per 1000 gallons drip oil, and all sand will be 20-40 mesh. Flush fluid will be untreated gelled drip. Do not exceed a maximum surface pump pressure of 6500 psig.
 - A. Pump 2000 gallons gelled drip mixed with 1/2 ppg sand.
Pump 2000 gallons gelled drip mixed with 3/4 ppg sand.
Pump 3000 gallons gelled drip mixed with 1 ppg sand.
Pump 3000 gallons gelled drip mixed with 1-1/4 ppg sand.
 - B. Inject fifteen (15) 7/8-inch RCN ball sealers.
13. Repeat item No. 12, Part A only. Displace the fracturing fluid with 100 barrels of gelled drip. This represents the capacity of the casing and tubing to the top of the perforations at 5542 feet KBM plus 20 barrels allowance for pumps and surface lines.
14. Rig up Halliburton wireline equipment and run a 7/8-inch weight section to determine the sand fillup in the 4-1/2-inch O.D. casing. Leave the well shut in for 8 hours.

15. Run a short production test through the separator. Release rig.

GENERAL INFORMATION

I. The following is a list of the volume requirements for the My-T-oil treatment:

80 barrels	- load hole
25 barrels	- fill tubing
95 barrels	- breakdown
476 barrels	- treating fluid
100 barrels	- displacement
<u>424</u> barrels	- contingencies
1200 barrels	- Total

Allow approximately one hour to gel one 300-barrel tank.

II. Four 300-barrel tanks will be used for drip storage.

III. All ram type preventers will have the hand wheels installed and operative at the time the preventers are installed.

Schematic - Not drawn to scale

Drilled by MFSC Aug 1973

Present Status Drawing
Clay Basin Unit Well No. 21
Daggett County, Utah
Sec. 29, T3N, R24E

Drawn by CEO 8/17/73

KB

GL Elevation 6343'

11'

	Net
9 5/8" OD Surface Casing	
1 NSCo Type B 10" 3000 psi casing flange	1.58
10 jts 9 5/8" -inch OD, 32.3#, H40	
8rd ST&C casing	304.99
1 Baker guide shoe	1.24
Total	307.81

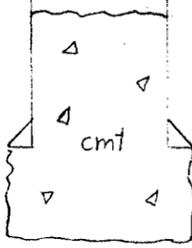
Above casing landed at 318.81' KB or 11.00 below KB.
Welded shoe and all collars. Cemented with 323 sx
Regular Type G cement good returns throughout.

	Net
4 1/2" OD Production Casing	
1 pc 4 1/2" OD, 11.6#, N-80, LT&C Casing	18.27
176 jts 4 1/2" OD, 11.6#, N-80, LT&C Casing	5703.33
1 Larkin float collar	1.58
1 jt 4 1/2" OD, 11.6#, N-80, LT&C Casing	32.37
1 Larkin guide shoe	1.73
Total	5757.23

Above csg landed at 5768.28 feet KBM or 11 feet below KB. Cemented with 450 sx 50-50 Pozmix w/ 2% gel.
Good returns throughout. Bumped plug w/ 500 psi.
Casing land in NSCo 10" 3000 psi casing flange
w/ indicator weight of 52,300 #.

9 5/8" OD csg landed at 318.81' KB

PBTD



4 1/2" OD csg landed at 5768.28' KB
6040' TD

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE S.L.C.
LEASE NUMBER _____
UNIT Clay Basin

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Daggett Field Clay Basin

The following is a correct report of operations and production (including drilling and producing wells) for the month of SEP 1973, 19____, _____

Agent's address P. O. BOX 11368 Company MOUNTAIN FUEL SUPPLY COMPANY
SALT LAKE CITY, UTAH 84139 Signed [Signature]

Phone 328-8315 Agent's title CHIEF ACCOUNTANT

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<u>SLC 062508 - Government Land Clay Basin Unit #21</u>										
SE SE 19	3N	24E	21							Spud July 26, 1973 TD 6,040' PBD 0' Dry and abandoned Final Report ✓

NOTE.—There were NO runs or sales of oil; NO M cu. ft. of gas sold;
NO runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. SL - 062508																				
2. NAME OF OPERATOR Mountain Fuel Supply Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME																				
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901		7. UNIT AGREEMENT NAME Clay Basin Unit																				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 661' FSL, 649' FEL SE SE		8. FARM OR LEASE NAME Unit Well																				
14. PERMIT NO. 43-009-30011	15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 6354' GR 6343'	9. WELL NO. 21																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Clay Basin																				
<table border="0"> <tr> <th colspan="2">NOTICE OF INTENTION TO:</th> <th colspan="2">SUBSEQUENT REPORT OF:</th> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER SHUT-OFF <input type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRACTURE TREATMENT <input type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input type="checkbox"/></td> <td>ABANDON* <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input type="checkbox"/></td> <td>ABANDONMENT* <input checked="" type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input type="checkbox"/></td> <td>(Other) <input type="checkbox"/></td> <td></td> </tr> </table>		NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:		TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>	FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>	SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>	REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 19-3N-24E
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:																				
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>																			
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>																			
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>																			
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>																				
		12. COUNTY OR PARISH Daggett																				
		13. STATE Utah																				

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 6040', PBD 0', rig released October 2, 1973.

Subject well was plugged and abandoned by laying the following plugs:

Plug No. 1: 4150-4050', 30 sacks
 Plug No. 2: 2500-2400', 30 sacks
 Plug No. 3: 325-275', 30 sacks
 Plug No. 4: 10 sacks into top of surface pipe.

A regulation abandonment marker will be installed and the location cleaned at a later date.

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

SIGNED BW Coft TITLE Vice President, Gas Supply Operations DATE Oct. 3, 1973

(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 TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R142

5. LEASE DESIGNATION AND SERIAL NUMBER
SL - 062508

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Clay Basin Unit

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
21

10. FIELD AND POOL, OR WILDCAT
Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SE SE 19-3N-24E

12. COUNTY OR PARISH
Daggett

13. STATE
Utah

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.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR
P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
661' FSL, 649' FEL SE SE

14. PERMIT NO.
43-009-30011

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB 6354' GR 6343'

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u> <input checked="" type="checkbox"/>	

(Other)

(NOTE: Report results of multiple completion or 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 6040'.

Rigged up work over unit on 9-18-73, perforated the following intervals with 2 holes per foot: 5542-5550', 5576-5582', 5603-5616', applied 19,500 gallons gelled drip oil to perforations, swabbed, applied 14,500 gallons gelled water with 2.5% HCL, swabbed, recovered spent acid water, set cast iron bridge plug at 5450', pulled 4130' of 4 1/2" casing.

Verbal approval was granted on 9-29-73 during a telephone conversation between Mr. Fraher with the U.S.G.S. and Mr. Myers with Mt. Fuel to plug and abandon the subject well by laying the following plugs:

- Plug No. 1: 4150-4050', 30 sacks
- Plug No. 2: 2500-2400', 30 sacks
- Plug No. 3: 325-275', 30 sacks
- Plug No. 4: 10 sacks into surface pipe.

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

SIGNED BW Craft TITLE Vice President, Gas Supply Operations DATE Oct. 3, 1973

(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.

169

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input checked="" type="checkbox"/>	Other _____	
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	
				DIFF. RESVR. <input type="checkbox"/>	Other _____	
2. NAME OF OPERATOR Mountain Fuel Supply Company						
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901						
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*						
At surface 661' FSL, 649' FEL SE SE						
At top prod. interval reported below						
At total depth						
14. PERMIT NO. 43-009-30011			DATE ISSUED			
15. DATE SPUNDED 7-26-73		16. DATE T.D. REACHED 8-15-73		17. DATE COMPL. (Ready to prod.) 10-2-73		
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* KB 6354'		GR 6343'		19. ELEV. CASINGHEAD -		
20. TOTAL DEPTH, MD & TVD 6040'		21. PLUG, BACK T.D., MD & TVD 0'		22. IF MULTIPLE COMPL., HOW MANY*		
23. INTERVALS DRILLED BY				ROTARY TOOLS 0-6040		
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* D & A				25. WAS DIRECTIONAL SURVEY MADE No		
26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Induction Focused, Densilog				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	
9-5/8	32.3	318.81	12-1/4	323	0	
4-1/2	11.6	5768.28	7-7/8	450	4130	
29. LINER RECORD						
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)		
30. TUBING RECORD						
SIZE	DEPTH SET (MD)	PACKER SET (MD)				
31. PERFORATION RECORD (Interval, size and number) 5542-5550', 5576-5582', 5603-5616', jet, 2 holes per foot			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED					
5542-5616	19,500 gals. gelled drip oil					
	14,500 gals. gelled water					
	with 2.5% HCL					
33.* PRODUCTION						
DATE FIRST PRODUCTION D & A		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.
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.) Vented while testing.				TEST WITNESSED BY		
35. LIST OF ATTACHMENTS Logs as above, Well Completion to be sent at a later date.						
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records						
SIGNED <u>BW Craft</u>		TITLE <u>Vice President, Gas Supply Operations</u>		DATE <u>Oct. 3, 1973</u>		

*(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.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	MEAS. DEPTH
					TRUE VERT. DEPTH
				Log tops:	
				Mancos	0'
				Frontier	5525'
				Mowry	5698'
				Dakota	5850'
				Morrison	5982'

COMPLETION REPORT

Well: Clay Basin Unit Well No. 21 Date: November 6, 1973

Area: Clay Basin Lease No: SL-062508

- New Field Wildcat
- Development Well
- Shallower Pool Test
- New Pool Wildcat
- Extension
- Deeper Pool Test

Location: 661 feet from South line, 649 feet from East line
SE $\frac{1}{4}$ SE $\frac{1}{4}$

Section 19, Township 3 North, Range 24 East

County: Daggett State: Utah

Operator: Mountain Fuel Supply Company

Elevation: KB 6354' Gr 6343' Total Depth: Driller 6040' Log 6030'

Drilling Commenced: July 26, 1973 Drilling Completed: August 15, 1973

Rig Released: August 17, 1973 Well Completed: October 1, 1973

Sample Tops: (unadjusted)

Log Tops:

Mancos	Surface	Mancos	Surface
Frontier	5525'	Frontier	5525' (+828)
Mowry	5710'	Mowry	5698' (+655)
Dakota	5862'	Dakota	5850' (+503)
Morrison	5992'	Morrison	5982' (+371)

Sample Cuttings: 5000' to 6040' - deposited Rock Springs Core Lab

Status: Plugged and abandoned

Producing Formation:

Perforations: Frontier: 5542-5550'; 5576-5582'; 5603-5616'

Stimulation: Sand-oil frac

Production: None

Plug Back Depth: 5740'

Plugs: 5740-6040'; 4150-4050' w/30 sacks; 2500-2400' w/30 sacks; 325-275' w/30 sacks; 10 sacks to surface

Hole Size: 12-1/4" to 330'; 7-7/8" to 6040'

Casing/Tubing: 9-5/8" @ 318.81'; 4-1/2" @ 5768.28'

Logging - Mud: Rented portable unit (Tooke Engineering) operated by company geologist 5000-6040', 2" Lithologic Strip Log - 5000-6040'

Mechanical: Dresser Atlas: Dual Induction Focused Log, Compensated Densilog

Contractor: Chandler & Associates

Completion Report Prepared by: R. L. Lloyd

Remarks:

COMPLETION REPORT (cont.)

Well: Clay Basin Unit Well No. 21

Area: Clay Basin

Cored Intervals (recovery): None

Tabulation of Drill Stem Tests:

<u>No.</u>	<u>Interval</u>	<u>IHP</u>	<u>IFP (min.)</u>	<u>ISIP (min.)</u>	<u>FFP (min.)</u>	<u>FSIP (min.)</u>	<u>FHP</u>	<u>Samples Caught</u>	<u>Remarks</u>
1	5535-5560	2780	52-54 (30)	1169 (88)	39-61 (123)	1246 (239)	2769	Mud	Rec. 120' Sli. GCM
2	5583-5663	2820	171-147 (30)	2375 (88)	68-103 (181)	2432 (316)	2774	Mud	60 Mcf level flow, Rec. 230' Sli. GCM; No top chart, stylus not engaged.
3	5864-5930	2879	35-39 (30)	134 (90)	39-45 (90)	210 (240)	2833	Mud	NGTS, Rec. 60' M. Unusual pressures. Plugging indicated, <u>Misrun</u>
4	5866-5930	2900	42-49 (30)	230 (90)	58-62 (90)	257 (240)	2866	Mud	NGTS, Rec. 60' M. Partial plugging indicated.
5	5944-6005	2886	167-563 (28)	2547 (91)	621-1464 (121)	2530 (240)	2883	Water, Mud	NETG, Rec. 360' G & WCM, 2660' W