

FILE NOTES

Entered in NID File
Location Map Pinned
Card Indexed

Checked by Chief *P.W.B.*
Approval Letter *10-28-90*
Disapproval Letter

COMPLETION DATA:

Date Well Completed *1-6-71*
.....
..... WW..... TA.....
..... OS..... PA.....

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log.....
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
SNC Sonic GR..... Lat..... Mi-L..... Sonic.....
CLog..... CLog..... Others.....



MOUNTAIN FUEL SUPPLY COMPANY

180 EAST FIRST SOUTH • P. O. BOX 11368 • SALT LAKE CITY, UTAH 84111 • PHONE 328-8315

October 15, 1970

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

Attn: Mr. Cleon B. Feight

Gentlemen:

Enclosed per the requirements of the State of Utah is the \$5,000 drilling bond in duplicate for Mountain Fuel Supply Company's Sunnyside Unit Well No. 1 located on fee land in Section 17, Township 15 South, Range 13 East, SLM, Carbon County, Utah.

The Notice of Intent to Drill will be forthcoming from our Rock Springs office.

I believe with this bond and the forthcoming Notice of Intent to Drill, all of the requirements will have been met, but if anything further is required, please advise.

Very truly yours,


R. L. McHenry
Landman

RLM:co
Encl

From: P. J. Radman

Rock Springs, Wyoming

To: R. G. Myers

October 26, 1970

Tentative Plan to Drill
Sunnyside Unit Well No. 1
Carbon County, Utah

This well will be drilled to total depth by Loffland Brothers Drilling Company using a contract rig. One work order has been originated for the drilling and completion of this well, namely 1070-19682, Drill Sunnyside Unit Well No. 1, located in C NW 1/4 SE 1/4 Sec. 17, T. 15 S., R. 13 E., Carbon County, Utah. Ground elevation is 5846 feet.

1. Using a contract dry hole digger, drill 26-inch hole to a depth of 15 feet below ground level. A cellar four feet deep will be required. Drill mouse hole and rat hole.
2. Run and cement 30 feet of 20-inch O.D. conductor pipe. This will provide 15 feet of casing as drilling nipple. With the conductor pipe on the bottom and centered, cement using 3.0 cubic feet of construction concrete with 2 percent calcium chloride which represents theoretical cement requirements plus 180 percent excess cement for 20-inch O.D. casing in a 26-inch hole.
3. After a WOC time of 12 hours, drill and ream to 17-1/2-inch hole using drilling mud to a depth of approximately 1030 feet KBM.
4. Run and cement approximately 1000 feet of 13-3/8-inch O.D., 61-pound, K-55, 8 round thread, ST&C casing. The casing will be cemented with 1242 sacks of regular cement which represents theoretical requirements plus 100 percent excess cement for 13-3/8-inch O.D. casing in 17-1/2-inch hole with cement returned to surface. Cement will be treated with 5837 pounds of Dowell D43A. Plan on leaving a 10 foot cement plug in the bottom of the casing after displacement is completed. A 13-3/8-inch O.D. Halliburton guide shoe will be run on the bottom of the casing and will be made up and spot welded to the

10/26/70

-2-

shoe joint. When running casing, the top and bottom of the casing collars of the first 6 joints and the last 6 joints of casing will be spot welded. A cellar four feet deep will be required. The bottom of the surface casing should be landed in such a manner that the top of the 12-inch Series 900 casing flange will be even with ground level. Circulate 175 barrels of drilling mud prior to beginning cementing operations. Capacity of the 13-3/8-inch O.D. casing is 152 barrels. If lost circulation is encountered while drilling the surface hole, consideration should be given to using cementing baskets and a higher percentage of excess cement. Note: Do not exceed a landing depth of 1000 feet for the 13-3/8-inch O.D. casing. If this landing depth must be exceeded, a Halliburton Type "E" super seal float valve collar will be required.

5. After a WOC time of 12 hours, back off the landing joint leaving the 13-3/8-inch O.D., 8 round thread collar looking up. Install a NSCo. Type "B" 12-inch Series 900 regular duty slip-on casing flange bored for 13-3/8-inch O.D. A short nipple (1 foot gross and threaded 8 round thread ST&C) of 13-3/8-inch O.D., 61-pound, K-55, 8 round thread, ST&C casing has been welded to the 12-inch Series 900 casing flange in the Rock Springs Machine Shop. The weld has been pressure tested to 500 psi. The collapse pressure for 13-3/8-inch O.D., 61-pound, K-55 casing is 1540 psig. Install a 2-inch extra heavy nipple, 6-inches long, and Nordstrom Figure 2354 (2000 psi WOG and 4000 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 12-inch Series 900 double gate hydraulically operated blowout preventer with blind rams in the bottom and 4-1/2-inch drill pipe rams in the top and a 12-inch Series 900 Hydril preventer

10/26/70

-3-

and finish nippling up. After a WOC time of 40 hours, pressure test surface casing, all preventer rams, and kelly-stop to 500 psi for 15 minutes using rig pump and water. The burst pressure rating of new 13-3/8-inch O.D., 61-pound, K-55, 8 round thread, ST&C casing is 2820 psi. Handwheels and extensions will be installed and operative before drilling out cement.

6. Drill out cement using a 12-1/4-inch bit. Drill ahead using an 8-3/4-inch bit to the tentative total depth of 10,000 feet or to such depth as recommended by the Geological Department. A fully manned mud logging unit will be used from below conductor casing to total depth. Mud logging unit will catch 10 foot samples from under conductor casing to total depth. A mud desander and desilter will be used from the bottom of surface casing to total depth. Eight drill stem tests are anticipated starting at approximately 1470 feet and will be run at such depths as recommended by the Geological Department. The mud system should be maintained at 8 to 10 cc water loss with a maximum weight of 10.5 ppg. Anticipated formation tops are as follows:

	<u>Approximate Depth (Feet KBM)</u>
Mancos	Surface
Dakota	1470
Cedar Mountain	1540
Buckhorn	1880
Morrison	1910
Summerville	2430
Curtis	2700
Entrada	2860
Carmel	3220
Navajo	3490
Kayenta	3810
Wingate	3940
Chinle	4300
Shinarump	4450
Upper Moenkopi	4490
Sinbad	5050
Lower Moenkopi	5110

10/26/70

-4-

	<u>Approximate Depth</u> <u>(Feet KBM)</u>
Kaibab	5310
Coconino	5440
Elephant Canyon	6110
Hermosa	6860
Manning Canyon	7260
Deseret	7950
Madison	8450
Ouray	9050
Elbert	9190
Cambrian	9260
Total Depth	10000

7. Run Schlumberger dual induction laterolog and borehole compensated sonic-gamma ray log (integrated) from below surface casing to total depth and the sidewall neutron log over zones of interest.
8. Assume commercial quantities of gas and/or oil are present as indicated by open hole drill stem tests and log analysis. Go into hole with 8-3/4-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. Install 5-1/2-inch casing rams in preventer. Maximum mud weight should not exceed 10.5 ppg.
9. Run 5-1/2-inch O.D., 17-pound, P-110, 8 round thread, LT&C casing through the deepest producing zone as indicated by open hole drill stem tests and log analysis. Cement casing with 50-50 Pozmix "A" cement with 2 percent gel, 0.8 percent CFR-2 (dispersing agent) and 0.3 percent HR-4 (retarder). This composition will provide a slurry volume of 1.26 cubic feet per sack and a slurry weight of 14.2 ppg. The cement will be preceded with 1000 gallons of mud flush. Bring cement top behind the 5-1/2-inch O.D. casing above the uppermost producing zone as indicated on drill stem tests and log analysis. Circulate 300 barrels of drilling mud prior to beginning cementing operations.

10/26/70

-5-

Capacity of the 5-1/2-inch O.D. casing is 232 barrels. Cement requirements will be based on actual hole size as determined by the caliper portion of the log and bottom hole temperature. Rotate casing while circulating, mixing and displacing cement. Displace cement with drilling mud. Save all displaced mud.

10. Immediately after cementing operations are completed, land the 5-1/2-inch O.D. casing with full weight of casing on slips in the 12-inch Series 900 casing flange and record indicator weight. Install NSCo. Type "B" 12-inch Series 900 by 6-inch Series 1500 pressure crossover tubing spool. Pressure test primary and secondary seals to 3000 psi for 5 minutes. Minimum collapse pressure for 5-1/2-inch O.D., 17-pound, P-110 casing is 7460 psi.
11. Release drilling rig.
12. Move in a contract workover rig.
13. Install a 6-inch Series 1500 hydraulically operated double gate preventer equipped with blind rams on the bottom and 2-3/8-inch tubing rams on top. Install a 6-inch Series 1500 hydraulically operated single gate preventer equipped with blind rams. Install a flow nipple. Handwheels and extensions will be installed and operative at the time the preventers are installed.
14. Rig up Dresser Atlas and run bond log and perforating formation control log from plugged back depth to check top of cement behind the 5-1/2-inch O.D. casing.
15. Pick up 4-5/8-inch bit and go into hole on the 2-3/8-inch O.D., 4.7-pound, N-80, 8 round thread, EUE tubing.
16. Using Halliburton pump truck and mud, pressure test casing and 2-3/8-inch tubing rams to 3000 psi for 15 minutes. The minimum internal yield for 5-1/2-inch O.D., 17-pound, P-110 casing is 9730 psi and the wellhead has a

10/26/70

-6-

working pressure of 5000 psi with a test pressure of 10,000 psi. Land tubing on the NSCo. Type H-1 tubing hanger and pressure test casing and blind rams to 3000 psi for 15 minutes.

17. A tentative plan to complete the well will be issued after results of the above items have been evaluated.

GENERAL INFORMATION

I. The Geologic Prognosis states the following:

- a. Cost Percentages: Mountain Fuel Supply Company 100%
- b. Well Responsibility: E. G. Mickel
- c. This proposed well is located approximately three and one half miles west of the Pan American No. 1 - USA Cullen Well (SE SE Sec. 11, T. 15 S., R. 13 E.). The Cullen well spudded in the Mancos formation and penetrated all of the formations that will be encountered at the Sunnyside Unit No. 1 well through the Elephant Canyon formation. The Hermosa and older formations were absent in the Cullen well and at total depth of 7417 feet the well bottomed in granite.
- d. The Cities Service No. 1 Gov't-Grassy Trail well (NE NW Sec. 1, T. 16 S., R. 12 E.), located approximately four miles southwest of the proposed Sunnyside Unit No. 1 well, spudded in the Mancos formation and at a total depth of 7930 feet bottomed in the Deseret formation.
- e. The Shell Oil Company Farnham Dome Unit No. 1-A well (SW SW Sec. 8, T. 15 S., R. 12 E.), located approximately six and one half miles west of the proposed Sunnyside Unit No. 1 well, spudded in the Mancos formation and at a total depth of 9174 feet bottomed in the Ouray formation.

II. The following tubular goods have been assigned to this well.

<u>Description</u>	<u>Approximate Gross Measurement (feet)</u>	<u>Availability</u>
	<u>Surface Casing</u>	
13-3/8-inch O.D., 61-pound, K-55, 8 round thread, ST&C casing	1,030	Rock Springs Warehouse
	<u>Production Casing</u>	
5-1/2-inch O.D., 17-pound, P-110, 8 round thread, LT&C casing	10,500	To be purchased
	<u>Production Tubing</u>	
2-3/8-inch O.D., 4.7-pound, N-80, 8 round thread, EUE tubing	10,500	To be purchased

10/26/70

-7-

- III. The drill pipe rams and the Hydril preventer will be operated once each 24 hours and the blind rams will be operated when drill pipe is out of hole.
- IV. The 5-1/2-inch O.D., P-110 casing will be inspected by a casing inspecting company on pipe racks at the location.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
Fee Land

6. IF INDIAN, ALLOTTED OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
Sunnyside Unit

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NW SE 17-15S-13E., S1B&M

12. COUNTY OR PARISH
Carbon

13. STATE
Utah

22. APPROX. DATE WORK WILL START*
November 1, 1970

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
OIL WELL GAS WELL OTHER Wildcat 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 1980' FEL, 1980' FSL NW SE
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
5 miles SW of Sunnyside, Utah.

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

16. NO. OF ACRES IN LEASE
440

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.
-

19. PROPOSED DEPTH
10,000

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
GR 5846' *Coal seam to Cambrian bed*

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26	20 ✓	-	30 ✓	3 cu. yds. ✓
17-1/2	13-3/8	61	1000 ✓	1242 sacks ✓
8-3/4	5-1/2	17	To be determined	

We would like your permission to drill the subject well to an estimated depth of 10,000'. Anticipated formation tops are as follows: Mancos at the surface, Dakota at 1470', Cedar Mountain at 1540', Buckhorn at 1880', Morrison at 1910', Summerville at 2430', Curtis at 2700', Entrada at 2860', Carmel at 3220', Navajo at 3490', Kayenta at 3810', Wingate at 3940', Chinle at 4300', Shinarump at 4450', Upper Moenkopi at 4490', Sinbad at 5050', Lower Moenkopi at 5110', Kaibab at 5310', Coconino at 5440', Elephant Canyon at 6110', Hermosa at 6860', Manning Canyon at 7260', Deseret at 7950', Madison at 8450', Ouray at 9050', Elbert at 9190' and Cambrian at 9260'.

We plan to drill this well with mud adequate to contain formation fluids and blow out preventers will be checked daily. ✓

A Tentative Plan to Drill the subject well will be sent at a later date. ✓

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 B. W. Croft TITLE Vice President,
Gas Supply Operations DATE Oct. 27, 1970

(This space for Federal or State office use)

PERMIT NO. 43 109-2212 APPROVAL DATE _____

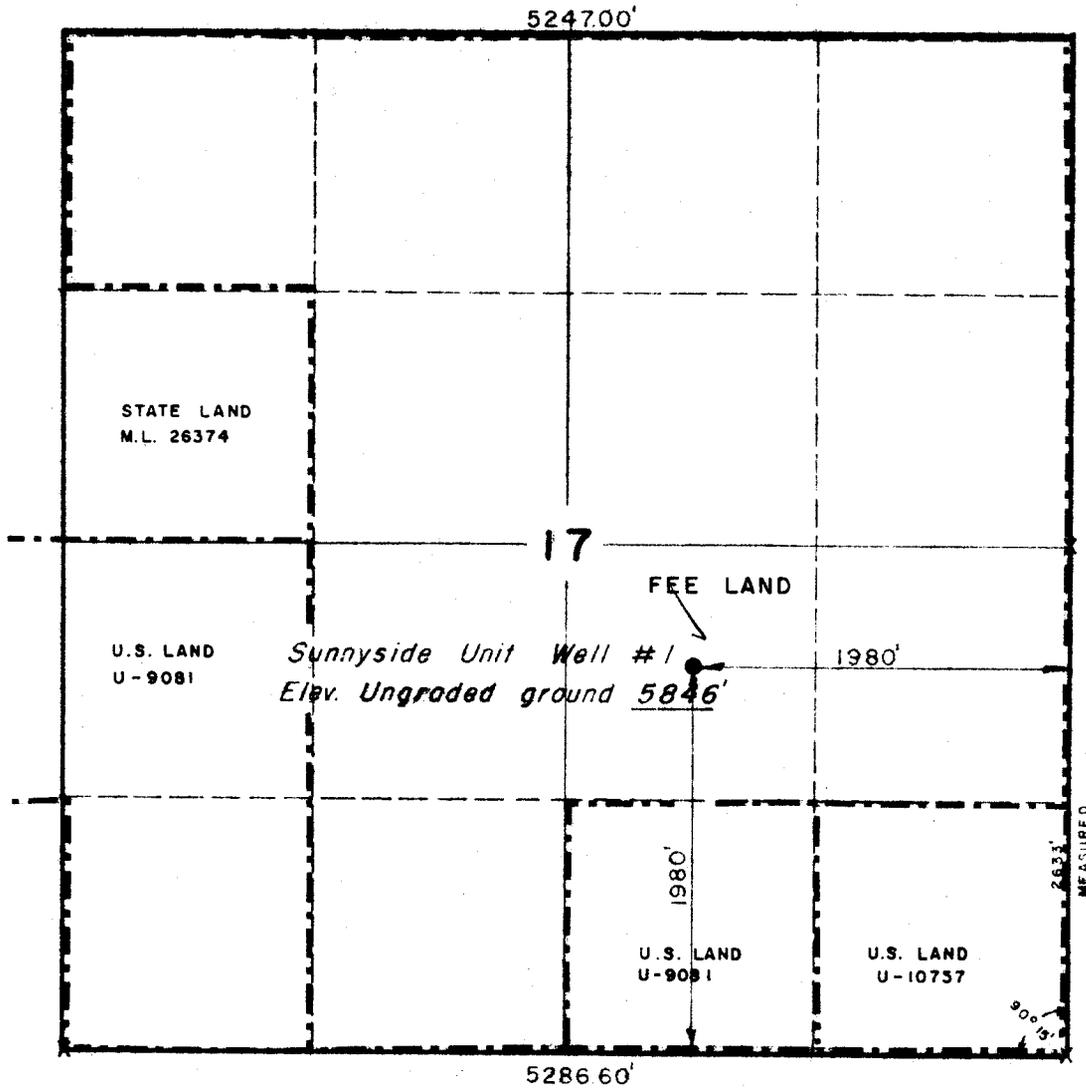
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

T15S, R13E, S.L.B.&M.

PROJECT
MOUNTAIN FUEL SUPPLY

Sunnyside Unit Well #1, Location
Located as shown in the NW1/4
SE 1/4, Sec.17, T15S, R13E, S.L.B.&M.,
Carbon County, Utah.



X = Corners Found (Stone)



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

Lawrence C. Kay
REGISTERED SURVEYOR
REGISTRATION NO 3137
STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING P.O. BOX Q - 110 EAST - FIRST SOUTH VERNAL, UTAH - 84078	
SCALE	DATE
1" = 1000'	Oct. 1, 1970
PARTY	REFERENCES
L.C.K. J.S.	GLO Plat 1885 SURVEY
WEATHER	FILE
Warm - Cool	Mountain Fuel Supply

October 28, 1970

Mountain Fuel Supply Company
Box 1129
Rock Springs, Wyoming 82901

Re: Sunnyside Unit #1
Sec. 17, T. 15 S, R. 13 E,
Carbon County, Utah
API No. 43-007-30012

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 cooperation with regard to completing this form will be greatly appreciated.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE
LEASE NUMBER
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Carbon Field Sunnyside

The following is a correct report of operations and production (including drilling and producing wells) for the month of NOV 1970, 19.....

Agent's address P.O. Box 11368 Company MOUNTAIN FUEL SUPPLY COMPANY
Salt Lake City, Utah 84111 Signed J. 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)
NW SE 17	15S	13E	1		Utah 9549 Fee Land					Spud 11-3-70 Drilling 5,300'

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.

INTEROFFICE COMMUNICATION

FROM R. G. Myers Rock Springs, Wyoming
CITY STATE

TO J. E. Adney DATE November 3, 1970

SUBJECT Tentative Plan to Drill
Sunnyside Unit Well No. 1
Carbon County, Utah

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 September 2, 1970.

The plan was reviewed October 29, 1970, by Messrs. S. J. Fisher, D. E. Dallas, and J. J. Sanna, and any necessary changes have been incorporated in this final plan. The plan was also reviewed by the Exploration Department.

RGM/gm

Attachment

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRU
(Other instructions
reverse side)

APP
n 12-

Form approved
Budget Bureau No. 42-R142

5. LEASE DESIGNATION AND SERIAL NO
Fee Land

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME
Sunnyside Unit

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
1

10. FIELD AND FOOT, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
NW SE 17-15S-13E., SLB&I

12. COUNTY OR PARISH
Carbon

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 Wildcat

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
1980' FSL, 1980' FSL NW SE

14. PERMIT NO.
-

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB 5863.60' GR 5846'

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 7040', drilling.
Spudded November 3, 1970, landed 13-3/8" surface casing at 1008' KBM and set with 1250 sacks of cement, returned 70 barrels cement to pit.
DST #1: 2504-2534', Summerville, IO 1/2 hour, ISI 1 hour, FO 1 hour, FSI 1 1/2 hours, opened with very weak blow on both openings, no gas, recovered 5' mud.
IHP 1221, IF 30, ISIP 50, PF 33, FSIP 50, FHP 1209.
DST #2: 5092-5134', Moenkopi, IO 1/2 hour, ISI 1 1/2 hours, FO 1 1/2 hours, FSI 3 hours, opened weak increasing to strong, no gas, reopened strong, gas in 23 minutes not enough to gauge, recovered 90' mud. IHP 2437, IOFP's 15-15, ISIP 1558, FOFP's 25-24, FSIP 1549, FHP 2428.
DST #3: 5135-5175', Sinbad, IO 1/2 hour, ISI 1 1/2 hours, FO 3 hours, FSI 5 1/4 hours, opened strong, no gas, reopened strong, gas in 25 minutes not enough to gauge, recovered 15' mud. IHP 2407, IOFP's 13-13, ISIP 1548, FOFP's 13-13, FSIP 1539, FHP 2407.
DST #4: 5361-5419', Lower Moenkopi, IO 1/2 hour, ISI 1 hour, FO 1 hour, FSI 1 1/2 hours, opened very weak on both openings, no gas, recovered 5' mud.
IHP 2550, IOFP's 0-0, ISIP 18, FOFP's 0-0, FSIP 0, FHP 2540.

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

SIGNED B. W. Crofton TITLE Vice President, Gas Supply Operations DATE Dec. 13, 1970

(This space for Federal or State office use)

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

API NO. 43-007-30012
SEC. 17, T. 15S, R. 13E
CARBON COUNTY, UTAH

NOTES FROM COVER ON OLD WELL FILE:

PLUGGING PROGRAM BY USGS - 1-3-71.



CHEM LAB

WATER ANALYSIS EXCHANGE REPORT

MEMBER Mountain Fuel Supply Co. LAB NO. 4932 REPORT NO. _____
 OPERATOR Mountain Fuel Supply Co. LOCATION NW SE 17-15S-13E
 WELL NO. Sunnyside Unit No. 1 FORMATION Mississippian
 FIELD Wildcat INTERVAL 7990 - 8080
 COUNTY Carbon SAMPLE FROM DST No. 5 (MFE)
 STATE Utah DATE January 5, 1971

REMARKS & CONCLUSIONS: Cloudy water, cloudy filtrate.

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	23,854	1037.67	Sulfate	956	19.88
Potassium	2900	74.24	Chloride	49,000	1381.80
Lithium	-	-	Carbonate	-	-
Calcium	5350	266.97	Bicarbonate	3196	52.41
Magnesium	915	75.21	Hydroxide	-	-
Iron	Present	-	Hydrogen sulfide	-	-
Total Cations 1454.09			Total Anions 1454.09		

Total dissolved solids, mg/l 84,549
 NaCl equivalent, mg/l 84,006
 Observed pH 6.2

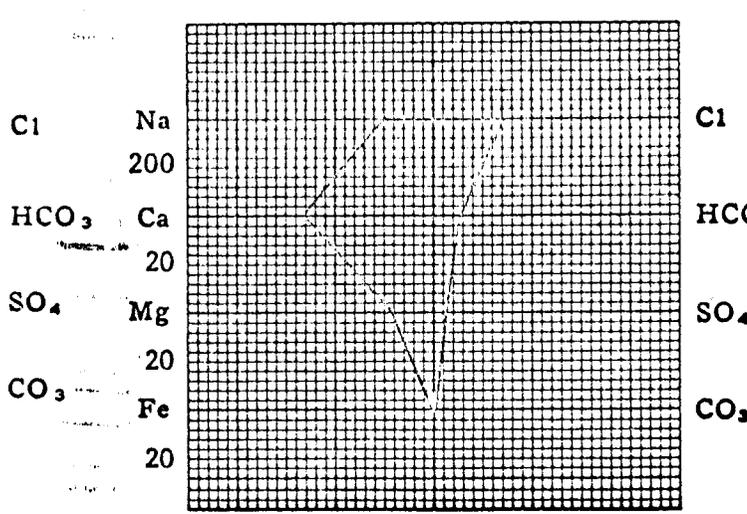
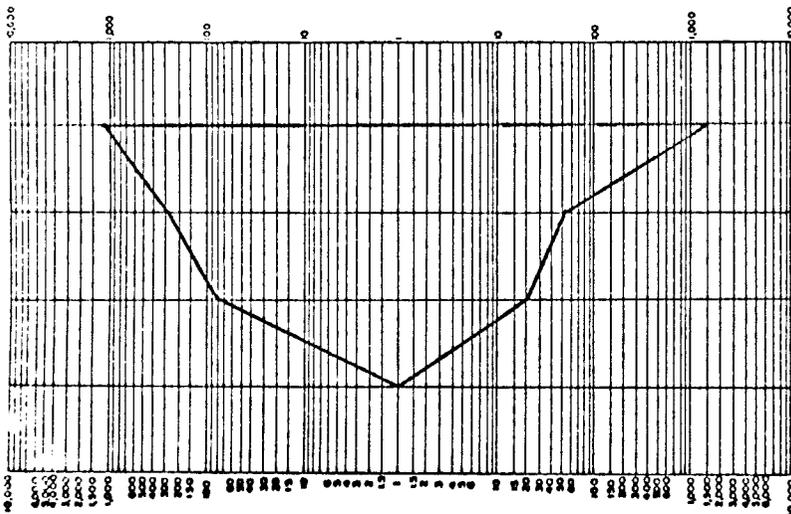
Specific resistance @ 68° F.:
 Observed 0.11 ohm-meters
 Calculated 0.10 ohm-meters

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

DIVISION OF OIL & GAS CONSERVATION
DEPARTMENT OF NATURAL RESOURCES

PLUGGING PROGRAMS

NAME OF COMPANY: MOUNTAIN FUEL SUPPLY

WELL NAME: Sunnyside Unit #1

Sec. 17 Township 15S Range 13E County Carbon

Verbal Approval Was Given to Plug the Above Mentioned Well in the Following Manner:

TOTAL DEPTH: 9158' Pre-Cambrian 13 3/8" casing set at 1008' with 1250 sacks

Tops:

Ferron: 1370
Dakota: 1726
Cedar Mountain: 1746
Buckhorn: 2015
Morrison: 2050
Summerville: 2546
Curtis: 2808
Entrada: 2930
Carmel: 3270
Navajo: 3565
Kayenta: 3868
Wingate: 3950
Chinle: 4350
Shinerump: 4526
Upper Moenkopi: 4570
Kaibab: 5504
Coconino: 5540
Elephant Canyon: 6340
Hermosa: 6950
Manning Canyon: 7390
Deseret: 7820
Madison: 8480
Devonian: 8870
Cambrian: 8950
Pre-Cambrian: 9090

Reportable gas shows in area of 5100-5200

Plugs:

8400-8500
7750-7850
5100-5200
4300-4400
3500-3600
1700-1800
900-1000

10 sacks at surface

Base of fresh water at bottom of Navajo
at approximately 3750

(Verbal approval by U.S.G.S. 1/4/71)

Date Approved: January 5, 1971

Signed: _____

FIELD Wildcat STATE Utah COUNTY Carbon SEC. 17 T. 15 S. R. 13 E.

COMPANY Mountain Fuel Supply Co. FARM Sunnyside Unit WELL NO. 1

LOCATION 1980' W. of E.L., 1980' N. of ELEV. KB 5863.6'
S.L.

DRILLING COMMENCED November 3, 1970 COMPLETED January 6, 1971

RIG RELEASED January 6, 1971 TOTAL DEPTH 9165' Schlum., 9161'SIM

CASING RECORD 13-3/8" - 1008' with 1250 sacks

	17		
	*		

TUBING RECORD None

PERFORATIONS None

I. P. None GAS _____ OIL _____

SANDS _____

SHUT-IN SURFACE PRESSURES _____

REMARKS _____

	FROM	TO
Shale, light to medium gray, firm to hard, silty, some dark carbonaceous inclusions; some Inoceramus fragments.	110	120
As above.	120	130
As above.	130	140
As above.	140	150
Shale, as above, becoming slightly sandy; with trace sandstone, light gray, some yellow, fine-grained; trace ostracod in yellow limestone.	150	160
Shale, light to medium gray, firm to hard, silty, with abundant carbonaceous inclusions; trace Inoceramus fragments; trace ostracod in yellow limestone.	160	170
As above.	170	180
As above.	180	190
Shale, as above, becoming slightly more silty; trace Inoceramus fragments; and ostracod in yellow limestone; trace yellow sandstone, very fine-grained to fine-grained.	190	200
Shale, light to medium gray, firm to hard, silty in part; trace Inoceramus fragments; and ostracod in yellow limestone.	200	210
As above.	210	220
As above.	220	230
Shale, as above; with some yellow to yellow-brown sandstone, very limonitic, very fine-grained to fine-grained, hard and tight, slightly arkosic; some ostracod.	230	240
Shale, as above; with slightly increasing sandstone, as above, approximately 15%.	240	250
Shale, as above; with decreasing sandstone, as above, less than 5%.	250	260
Shale, as above; with trace sandstone, as above.	260	270
Shale, light to medium gray, silty, firm to hard; with trace Inoceramus fragments and ostracod.	270	280
Shale, as above.	280	290

	FROM	TO
Shale, as above.	290	300
Shale, as above.	300	310
Shale, as above.	310	320
Shale, as above.	320	330
Shale, as above.	330	340
Shale, as above.	340	350
Shale, light to medium gray, slightly less silty, firm to hard; with trace Inoceramus fragments, and ostracod.	350	360
Shale, as above; with few Inoceramus fragments.	360	370
Shale, as above.	370	380
Shale, as above.	380	390
Shale, as above.	390	400
Shale, light to medium gray, firm to hard, silty, with carbonaceous inclusions.	400	410
Shale, as above, becoming less silty.	410	420
Shale, as above.	420	430
Shale, as above.	430	440
Shale, as above, becoming slightly silty, with some mica.	440	450
Shale, as above	450	460
Shale, light to medium gray, firm, with carbonaceous inclusions, silty in part.	460	470
Shale, as above.	470	480
Shale, as above.	480	490
Shale, light to medium gray, silty in part, firm to hard, carbonaceous inclusions, some mica.	490	500
Shale.	500	510
Shale.	510	520
Shale.	520	530
Shale, as above, becoming slightly silty in part, slightly sandy in part.	530	540
Shale, as above, but less sandy.	540	550
Shale, light to medium gray, firm, some silty, some carbonaceous inclusions; trace white, fine-grained sandstone.	550	560
Shale, as above; with trace Inoceramus fragments.	560	570
Shale, as above, becoming slightly siltier.	570	580
Shale, as above; with trace white to tan, very fine-grained to fine-grained sandstone, with limonitic stain; trace ostracod.	580	590
Shale, as above; with sandstone, as above; trace ostracod; trace Inoceramus fragments.	590	600
Shale, light gray to medium gray, silty; no sandstone; trace Inoceramus fragments.	600	610
Shale, as above; trace ostracod; trace glauconite.	610	620
Shale, light to medium gray, firm, silty, with carbonaceous inclusions; trace ostracod.	620	630
Shale, as above; with trace ostracod; trace Inoceramus fragments.	630	640
Shale, as above, becoming slightly siltier; trace Inoceramus fragments.	640	650
Shale and siltstone, light to medium gray, firm, some sandy, carbonaceous inclusions; trace ostracod.	650	660
Shale and siltstone, as above.	660	670
Shale and siltstone, as above; with trace ostracod; trace sandstone, gray to yellow, fine-grained, hard and tight.	670	680
As above.	680	690
Shale and siltstone, as above; with trace sandstone, as above; trace ostracod.	690	700
As above, with siltstone, decreasing; trace ostracod; trace Inoceramus fragments.	700	710

	FROM	TO
Shale and siltstone, light to medium gray, firm, with carbonaceous inclusions; trace gray sandstone, as above.	710	720
Shale and siltstone, as above.	720	730
As above, with trace Inoceramus fragments.	730	740
Shale, as above; with some siltstone, as above; trace Inoceramus fragments.	740	750
Shale, as above; with some siltstone, as above.	750	760
Shale, light to medium gray, silty in part; trace ostracod.	760	770
As above.	770	780
As above.	780	790
As above.	790	800
Shale, light to medium gray, very silty; with trace gray sandstone, very fine-grained, hard and tight, very silty.	800	810
Shale, as above, with decreasing silt.	810	820
Shale and siltstone, light to medium gray, firm to hard, carbonaceous inclusions, some mica.	820	830
As above, with ostracod and Inoceramus fragments.	830	840
Shale, as above; with siltstone, decreasing, as above; trace ostracod and Inoceramus fragments.	840	850
Shale and siltstone, light to medium gray, firm to hard; with trace gray to yellow, very fine-grained sandstone, hard and tight, dirty.	850	860
Shale and siltstone, as above; with trace Inoceramus fragments.	860	870
As above.	870	880
Shale and siltstone, light to medium gray, firm to hard, some micaceous; trace sandstone.	880	890
As above, with trace Inoceramus fragments; trace ostracod.	890	900
Shale and siltstone, as above; with trace Inoceramus fragments and ostracod.	900	910
Shale, medium gray, firm, silty in part; trace Inoceramus fragments.	910	920
As above.	920	930
Shale, as above, becoming slightly siltier; trace Inoceramus fragments.	930	940
As above.	940	950
Shale, light to medium gray, firm, silty in part, carbonaceous inclusions; trace Inoceramus fragments.	950	960
As above.	960	970
As above.	970	980
As above, with trace ostracod.	980	990
Shale, light to medium gray, silty in part, carbonaceous inclusions; trace Inoceramus fragments and ostracod.	990	1000
As above.	1000	1010
As above.	1010	1020
Bad samples - Cement.	1020	1030
Bad samples - Cement.	1030	1040
Bad samples - Cement.	1040	1050
Bad samples - Cement.	1050	1060
Shale, dark gray to gray, firm, partly silty, carbonaceous (Inoceramus prisms).	1060	1070
As above.	1070	1080
As above with ostracodes.	1080	1090
As above.	1090	1100
As above.	1100	1110
As above; trace sandstone, white, light gray, very fine-grained, subangular to sub-rounded, friable, very calcareous; ostracod.	1110	1120

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 4
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Supply Company

	FROM	TO
Shale, dark gray, black, soft to firm, silty; with ostracods; sandstone, as above; limestone, brown, micro-crystalline, hard.	1120	1130
Shale, as above; with ostracods.	1130	1140
Shale, as above.	1140	1150
As above.	1150	1160
As above.	1160	1170
As above.	1170	1180
As above.	1180	1190
As above.	1190	1200
As above.	1200	1210
As above; trace siltstone, pink, hard.	1210	1220
Shale, dark gray, massive, firm, friable, some silty; siltstone, dark gray, light gray, massive, firm, friable; trace bentonite.	1220	1230
Shale, as above.	1230	1240
Shale, as above; bentonite, light gray, soft, with pyrite, with brown mica flakes.	1240	1250
Shale, as above; bentonite, as above; Inoceramus prisms.	1250	1260
Shale, as above, black stain on shale may be dead oil; some bentonite, as above.	1260	1270
Shale, as above; bentonite.	1270	1280
As above.	1280	1290
Shale, as above; bentonite.	1290	1300
Shale, dark gray, black, soft to firm, massive, silty in part; sandstone, gray, very fine-grained, subangular to sub-rounded, soft, friable, no porosity and permeability, no show, very calcareous; siltstone, gray, firm.	1300	1310
As above; with bentonite.	1310	1320
As above.	1320	1330
As above (20%-30% sandstone).	1330	1340
Shale, as above; sandstone, white, light gray, very fine-grained, subangular to sub-rounded, some salt and pepper, firm, friable, no calcareous; bentonite, gray, soft; with brown mica inclusions (sandstone 50%).	1340	1350
Shale, as above; siltstone, as above; sandstone, as above (less than 50 sample) Inoceramus prisms.	1350	1360
Shale, as above; bentonite, as above; with pyrite, with brown mica; sandstone, white, light gray, gray, very fine-grained, subangular to sub-rounded, hard, friable, not calcareous, no porosity and permeability, some green mineral, few dark minerals.	1360	1370
Sandstone, white, light gray, very fine to fine-grained, subangular to sub-rounded, some sorting, soft, friable, micaceous, glauconitic, some porosity and permeability; bentonite, white to light gray, with brown mica; with pyrite; kaolinite in sample.	1370	1380
Sandstone, as above; shale, as above; kaolinite, as above; bentonite, gray, with pyrite, with mica, no show.	1380	1390
Sandstone, white, light gray, very fine-grained to fine-grained, subangular to sub-rounded, some sorting, soft to firm, friable, glauconitic, micaceous, no fluorescence, slightly calcareous, no gas reading increase, background gas at 10 units.	1390	1400
As above, white and gray sandstone laminated; with more shale, as above; bentonite, light gray, with brown mica, with pyrite.	1400	1410
As above.	1410	1420
Sandstone, white, light gray, very fine-grained, subangular to sub-rounded, some sorting, soft to firm, friable, slightly calcareous, kaolinite, no fluorescence, no cut; shale, as above; trace pyrite.	1420	1430

FARM Sunnyside Unit WELL NO. 1COMPANY Mountain Fuel Supply Company

	FROM	TO
Shale, dark gray, black, silty, soft to firm, friable; sandstone, as above; kaolinite; trace chert.	1430	1440
As above.	1440	1450
Shale, dark gray, black, very silty to sandy, soft to firm; sandstone, dark gray, light gray, very fine-grained, subangular to sub-rounded, soft, friable, slightly calcareous, tight.	1450	1460
Shale, as above.	1460	1470
As above, with Inoceramus prisms.	1470	1480
Shale, dark gray, black, silty in part, soft to firm, friable, siliceous; some sandstone, as above.	1480	1490
Shale, as above.	1490	1500
As above.	1500	1510
Shale, as above, very silty to sandy in part; bentonite, white, with brown mica, with pyrite.	1510	1520
As above, bentonite, as above; trace sandstone, white, transparent, very fine-grained, angular to subangular, soft to firm, friable, tight.	1520	1530
As above.	1530	1540
As above, sandstone 40% of sample.	1540	1550
Shale, as above; bentonite, as above; trace sandstone, as above.	1550	1560
As above, with ostracods.	1560	1570
As above.	1570	1580
As above.	1580	1590
Shale, dark gray, soft to firm, very silty, very calcareous; bentonite; trace coal.	1590	1600
As above.	1600	1610
Shale, as above.	1610	1620
As above.	1620	1630
As above.	1630	1640
Shale, dark gray, black, very silty to sandy, soft to firm, very calcareous; sandstone, light gray, gray, transparent, very fine-grained, angular to sub-rounded, soft, friable, very calcareous, tight; bentonite, light gray, with brown inclusions.	1640	1650
As above.	1650	1660
As above; with abundant bentonite.	1660	1670
Shale, as above; claystone, gray, soft; sandstone, as above, clay filled; bentonite.	1670	1680
As above.	1680	1690
Bentonite, light gray, white, gray, greenish-gray, soft, some sandy, some with pyrite, some with mica; shale, as above; siltstone, green, massive, hard.	1690	1700
As above.	1700	1710
As above; trace sandstone, white, transparent, very fine-grained, angular to subangular, bentonitic, soft.	1710	1720
Bentonite, as above; sandstone, white, light gray, transparent, very fine to fine-grained, angular to sub-rounded, some shaly, some micaceous, no show; shale, as above.	1720	1730
Sandstone, gray, light gray, very fine-grained, fine-grained, angular to sub-rounded, soft to hard, some large dark mineral, clay filled; bentonite, as above; some shale, as above.	1730	1740
Limestone, blue-white, tan, some dark gray, soft to hard, micro-crystalline, with trace pyrite.	1740	1750
As above, claystone, green, gray, soft to firm, with calcareous grain inclusions.	1750	1760
As above, some greenish, trace chert, sandy in part; some bentonite, as above; claystone, as above.	1760	1770

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 6
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Supply Company

	FROM	TO
Claystone, green, gray, soft to firm with sand grains; sandstone, dark gray, black, very fine-grained, friable, clay filled, shaly.	1770	1780
As above.	1780	1790
Claystone, gray, dark gray, greenish-gray, soft, massive, some with sand grain inclusion.	1790	1800
As above; some limestone, tan, as above.	1800	1810
Claystone, gray, greenish-gray, purplish-gray, soft, massive, some with calcareous crystalline inclusions; chert.	1810	1820
Claystone, gray, greenish-gray, brown, as above.	1820	1830
Shale, brown, massive, firm, silty, some calcareous; claystone, as above; some limestone, tan, massive, micro-crystalline, hard.	1830	1840
As above.	1840	1850
As above.	1850	1860
As above.	1860	1870
Claystone, gray, light gray, greenish-gray, purplish-gray, soft to firm; shale, as above; limestone, white, hard, micro-crystalline; chert.	1870	1880
As above, with some claystone, silty to sandy.	1880	1890
As above.	1890	1900
Claystone, gray, light gray, greenish-gray, soft, massive, with calcareous crystalline inclusion; limestone, tan, gray, hard, micro-crystalline; chert, purple, brown.	1900	1910
As above.	1910	1920
Shale, brown, soft to hard, friable, silty; claystone, as above; limestone, as above; chert, as above.	1920	1930
As above.	1930	1940
As above.	1940	1950
Claystone, purplish-gray, gray, greenish-gray, soft to firm, friable, some silty to sandy; limestone, as above; shale, as above.	1950	1960
As above.	1960	1970
Claystone, purplish-gray, gray, soft to firm, some silty, some with calcareous crystalline.	1970	1980
As above.	1980	1990
As above.	1990	2000
No shows.	2000	2010
Chalcedony (quartzitic material) Flint, chert, jasper, varicolored, hard.	2010	2020
As above.	2020	2030
As above.	2030	2040
Shale, red, some purple, soft, with sand grain inclusion.	2040	2050
As above.	2050	2060
Shale, red, maroon, as above; sandstone, red, pink, very fine-grained, firm, friable, clay filled.	2060	2070
As above, some very silty; increase in sandstone, red, pink, very fine-grained, sub-rounded, clay filled, porosity and permeability.	2070	2080
Shale, as above; abundant sandstone, as above.	2080	2090
Shale, maroon, gray, soft to firm, massive, very silty, some waxy.	2090	2100
Shale, as above, maroon, gray, purple.	2100	2110
As above.	2110	2120
As above.	2120	2130
Shale, light gray, gray, dark gray, some maroon and purple, soft, massive, some silty; chert.	2130	2140
As above.	2140	2150

	FROM	TO
As above, with increase in maroon and purple, chert.	2150	2160
As above, with abundant chert, gray, white, tan, brown.	2160	2170
As above.	2170	2180
Siltstone, gray, hard, massive, some salt and pepper; some shale, as above.	2180	2190
Shale, as above; some siltstone, as above.	2190	2200
Siltstone, as above; shale, as above.	2200	2210
Siltstone, gray, greenish-gray, soft to firm, massive, silty; some shale, as above.	2210	2220
Siltstone, as above; shale, gray, greenish-gray, hard, massive, calcareous, silty.	2220	2230
As above.	2230	2240
As above; shale, gray, tan, soft to firm, massive, shaly; some limestone, brown, tan.	2240	2250
Shale, gray, greenish-gray, firm to hard, silty to very silty; limestone, as above.	2250	2260
As above.	2260	2270
As above.	2270	2280
As above.	2280	2290
Shale, as above; limestone, purple, hard, with some bentonite.	2290	2300
As above.	2300	2310
Shale, gray, dark gray, greenish-gray, some maroon, soft to hard, silty to very silty; siltstone, greenish-gray, massive, tight, hard, very shaly, with some pyrite, bentonite.	2310	2320
As above.	2320	2330
As above.	2330	2340
As above.	2340	2350
As above.	2350	2360
As above.	2360	2370
Shale, gray, greenish-gray, purple, maroon, soft to hard, silty; siltstone, as above; trace sandstone, white, angular to sub-rounded, soft, friable, very calcareous, clay filled, tight.	2370	2380
Shale, as above; sandstone, white, very fine-grained, angular to sub-rounded, hard, very calcareous, tight; siltstone, as above.	2380	2390
Sandstone, white, subangular to sub-rounded, friable, very calcareous, hard, some dark min., tight, porosity and permeability, very small gas-kick (13 units over 4') none on chromatograph, very light blue scattered fluorescence no cut.	2390	2400
As above, no fluorescence or cut.	2400	2410
Shale, gray, dark gray, soft to firm, silty to very silty; trace sandstone, as above; siltstone, greenish-gray, hard; bentonite; limestone, brown, hard, micro-crystalline.	2410	2420
As above, with chert.	2420	2430
As above.	2430	2440
As above.	2440	2450
Shale, gray, light gray, brown, soft to firm, massive, silty, some calcareous; siltstone, greenish-gray, hard; limestone, brown, micro-crystalline, hard.	2450	2460

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 8
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Supply Company

	FROM	TO
As above, with abundant limestone, gray, brownish-gray, hard, micro-crystalline.	2460	2470
Shale, as above; limestone, as above; siltstone, as above; trace sandstone, white, very fine to fine-grained, angular to sub-rounded, some dark mineral, very calcareous, no shows.	2470	2480
Shale, as above, some bentonitic; siltstone, as above; limestone, as above.	2480	2490
Shale, gray, light gray, brown, soft to firm, massive, some bentonitic, silty to very silty; siltstone, gray, greenish-gray, firm, massive, shaly.	2490	2500
Sandstone, white, very fine to fine-grained, angular to sub-rounded, soft to firm, friable, very calcareous, no hydrocarbon show - 23 unit increase on hot wire, 6 unit increase of CO ₂ on chromatograph	2500	2510
Shale, as above; some sandstone, as above.	2510	2520
Sandstone, brown, gray, as above; siltstone; trace sandstone, white, transparent, very fine to fine-grained, angular to subrounded, firm, friable, calcareous.	2520	2530
Bad samples.	2530	2560
Shale, gray, brown, red, purple, soft to firm, shaly; limestone, brown; sandstone, white, gray, very fine-grained, subangular to sub-rounded, firm, friable, very calcareous.	2560	2570
Shale, as above; siltstone, gray, soft, friable, sandy.	2570	2580
Shale, brown, gray, as above; abundant limestone, brown, hard, micro-crystalline.	2580	2590
Shale, gray, brown, as above; limestone, as above; sandstone, very fine-grained, pink to red, angular to sub-rounded, hard, calcareous.	2590	2600
Shale, as above; sandstone, white, light gray, very fine-grained, sub-rounded, hard, very calcareous, tight.	2600	2610
Sandstone, as above; sandstone, white, transparent, fine to medium-grained, angular, very calcareous, firm, friable, tight; shale, as above.	2610	2620
As above.	2620	2630
Shale, brown, red, gray, greenish-gray, soft, massive, some silty to very silty; sandstone, as above; siltstone, pink, red, light gray, bentonite, calcareous, firm; chert.	2630	2640
Shale, gray, brown, purple, as above; sandstone, white, transparent, pink, very fine to fine-grained, few dark mineral, angular to sub-rounded, firm, friable, calcareous.	2640	2650
Shale, dark brown, greenish-gray, silty to very silty, soft to firm, calcareous; bentonite; limestone, brown, hard; siltstone, brown, soft, shaly.	2650	2660
As above.	2660	2670
As above; sandstone, white, transparent, very fine to fine to medium-grained, angular to subangular to sub-rounded, few dark mineral, soft, friable, calcareous.	2670	2680
Shale, as above; siltstone, as above; claystone, gray, bentonitic, soft.	2690	2700
As above.	2700	2710
As above.	2710	2720
As above.	2720	2730
As above.	2730	2740

	FROM	TO
As above.	2740	2750
As above.	2750	2760
As above.	2760	2770
As above.	2770	2780
As above.	2780	2790
As above.	2790	2800
Sandstone, green, some gray, very fine to fine-grained, subangular to sub-rounded, some sorting, glauconitic, soft to firm, very calcareous, some dark mineral; some clay, white, soft (kaolinite).	2800	2810
As above.	2810	2820
As above.	2820	2830
Sandstone, greenish-gray, fine-grained, some medium-grained, sub-rounded to rounded, some sort, very glauconitic, some dark mineral, firm, friable, very calcareous, with kaolinite.	2830	2840
As above.	2840	2850
As above.	2850	2860
As above.	2860	2870
As above.	2870	2880
As above.	2880	2890
As above.	2890	2900
As above.	2900	2910
As above.	2910	2920
Shale, gray, soft, massive, calcareous; sandstone, as above; sandstone, transparent, medium-grained, sub-rounded to rounded, firm, friable, very calcareous; siltstone, sandy, red, brown, soft, friable, some dark mineral, calcareous.	2920	2930
Siltstone, as above, some black; some shale, as above, some brown; kaolinite.	2930	2940
As above.	2940	2950
As above.	2950	2960
As above; sandstone, red brown, very fine-grained, sub-rounded to rounded, silty, soft, friable, very calcareous.	2960	2970
As above.	2970	2980
Sandstone, as above; siltstone, as above; shale, as above; kaolinite.	2980	2990
As above.	2990	3000
As above.	3000	3010
Siltstone, as above; sandstone, as above.	3010	3020
Sandstone, as above.	3020	3030
Sandstone, red, white, green, gray, transparent, very fine to medium-grained; subangular to rounded, sort, soft, friable, some glauconitic, some with orange grains; shale, gray, green, brown, purple, soft to firm, massive, kaolinite.	3030	3040
As above.	3040	3060
Sandstone, red, brown, very fine-grained, as above; siltstone, as above; some sandstone, white, transparent; shale, as above; kaolinite.	3060	3070
As above.	3070	3080
Shale, green, gray, purple, brown, soft, massive, some with sand grain inclusion; sandstone, as above, red, brown; siltstone, as above; abundant bentonite.	3080	3090
As above.	3090	3100
As above.	3100	3110
As above, with more brown.	3110	3120

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 10
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Suuply Company

	FROM	TO
Siltstone, red, brown, firm, dandy, massive; sandstone, red, brown, some gray, very fine-grained, soft, friable, subangular to rounded, shaly, very calcareous, some mica; abundant bentonite.	3120	3130
As above.	3130	3140
Sandstone, as above; siltstone, as above; some shale, as above; dolomite, pink, hard, kaolinite.	3140	3150
Sandstone, as above; some gray, with orange inclusions; dolomite, as above; bentonite; kaolinite; some shale, as above.	3150	3160
As above.	3160	3170
As above; limestone, brown, hard.	3170	3180
As above.	3180	3190
As above.	3190	3200
As above.	3200	3210
As above.	3210	3220
As above.	3220	3230
Siltstone, red, brown, shaly, soft, massive; sandstone, red, brown, as above.	3230	3240
As above.	3240	3250
As above.	3250	3260
Shale, greenish-gray, gray, firm to hard, some silty, massive, slightly calcareous; anhydrite.	3260	3270
As above.	3270	3280
As above.	3280	3290
As above; sandstone, white, light gray, very fine to fine-grained, angular to subangular, sort, clay filled, tight; anhydrite.	3290	3300
Shale, gray soft, massive, some silty; siltstone, gray, greenish-gray, shaly, sandy, firm to hard; abundant anhydrite.	3300	3310
As above.	3310	3320
Siltstone, as above; shale, as above, some greenish-gray; anhydrite.	3320	3330
As above.	3330	3340
Siltstone, as above, very sandy; shale, as above; anhydrite.	3340	3350
As above.	3350	3360
As above.	3360	3370
As above.	3370	3380
As above; some sandstone, gray, very fine-grained, subangular to subrounded, shaly, very soft, calcareous.	3380	3390
As above; with sandstone, as above; abundant anhydrite; some shale, as above.	3390	3400
As above, with abundant anhydrite.	3400	3410
Siltstone, as above, very sandy; sandstone, as above; anhydrite, some shale, as above.	3410	3420
Siltstone, as above; sandstone, as above; shale, as above; anhydrite.	3420	3430
As above, with abundant anhydrite, abundant gypsum.	3430	3440
As above, with abundant anhydrite, abundant gypsum; limestone, dark brown, black, hard, micro-crystalline.	3440	3450
As above.	3450	3460
Siltstone, as above; sandstone, gray, light gray, very fine-grained, sub-rounded to rounded, micaceous, soft, friable, very calcareous; some shale, as above; anhydrite; kaolinite; limestone, dark gray, hard, micro-crystalline.	3460	3470
Sandstone, as above; siltstone, as above; limestone, as above; trace shale, as above; anhydrite; kaolinite.	3470	3480
Limestone, dark gray, some white, soft to firm to hard, micro-crystalline.	3480	3490
Limestone, as above; fossil.	3490	3500

	FROM	TO
Limestone, as above; sandstone, white, very fine-grained, sub-rounded to rounded, firm, friable, very calcareous.	3500	3510
Limestone, as above.	3510	3520
Limestone, as above.	3520	3530
Limestone, as above; sandstone, gray very fine-grained, sub-rounded to rounded, soft, very calcareous.	3530	3540
Limestone, as above, finely crystalline.	3540	3550
Sandstone, white to clear, some with yellow tint, fine to medium grained, hard and tight, medium to well rounded and soft, very slightly calcareous, siliceous cement.	3550	3560
Sandstone, as above.	3560	3570
Sandstone, as above.	3570	3580
Sandstone, as above.	3580	3590
Sandstone, as above, trip sample, abundant cavings.	3590	3600
Sandstone, as above, with abundant cavings, as above.	3600	3610
Sandstone, white to clear, frosted, very fine to medium-grained, hard and tight, slightly calcareous, moderately to well sorted and rounded.	3610	3620
Sandstone, as above.	3620	3630
Sandstone, as above.	3630	3640
Sandstone, as above.	3640	3650
No sample.	3650	3660
Sandstone, white to clear, some frosted, very fine to medium-grained, medium to well sorted and rounded, slightly calcareous, hard and tight.	3660	3670
Sandstone, as above.	3670	3680
Sandstone, as above.	3680	3690
Sandstone, as above, with some light green; siltstone and shale, slightly pyritic.	3690	3700
Sandstone, as above, becoming finer-grained and less consolidated; siltstone and shale, as above.	3700	3710
Sandstone, white, very fine to fine-grained, well sorted, moderately rounded, hard and tight, slightly calcareous; siltstone and shale, light green to gray, firm.	3710	3720
As above.	3720	3730
As above.	3730	3740
As above.	3740	3750
As above.	3750	3760
As above.	3760	3770
Sandstone, white, very fine to fine-grained, well sorted, moderately rounded, some unconsolidated.	3770	3780
As above.	3780	3790
As above.	3790	3800
Sandstone, white, very fine to fine-grained, well sorted, moderately rounded.	3800	3810
As above.	3810	3820
Sandstone, as above, with some green to gray; siltstone and shale.	3820	3830
Sandstone, as above; with some sandstone, pink, very fine to fine-grained, slightly silty.	3830	3840
Sandstone, pink, orange, very fine to fine-grained, slightly silty in part, hard and tight.	3840	3850
Sandstone, pink to orange, as above, well sorted, less silty.	3850	3860
As above.	3860	3870
Sandstone, as above.	3870	3880

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 12
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Supply Company

	FROM	TO
Sandstone, orange to pink, very fine to fine-grained, moderately to well sorted, moderately to well rounded, some frosted, slightly calcareous, hard to firm, with trace porosity.	3880	3890
As above.	3890	3900
Sandstone, as above, with some green to gray siltstone and shale.	3900	3910
As above.	3910	3920
As above.	3920	3930
Sandstone, as above; with siltstone and shale, decreasing.	3930	3940
As above.	3940	3950
Sandstone, as above.	3950	3960
Sandstone, as above, with sandstone, white, very fine to fine-grained, well sorted, some friable, moderately rounded.	3960	3970
Sandstone, white, pink, very fine to fine-grained, moderately sorted and rounded, some friable; some gray-green shale.	3970	3980
Sandstone, as above, with some light green to gray shale and siltstone.	3980	3990
Sandstone, as above, with abundant shale and siltstone, as above.	3990	4000
Trip sample.	4000	4010
Sandstone, pink to cream, very fine to fine-grained, well sorted, moderately rounded, hard with some porosity, some green-gray shale.	4010	4020
Sandstone, as above, with some green-gray, waxy; shale, as above.	4020	4030
Sandstone, as above, with some green-gray, waxy; shale, as above.	4030	4040
Sandstone, as above.	4040	4050
Sandstone, as above.	4050	4060
Sandstone, cream, very fine to fine-grained, moderately to well sorted and rounded, hard and tight, with some gray-green shale.	4060	4070
Sandstone, as above.	4070	4080
Sandstone, as above.	4080	4090
Sandstone, pink-orange, very fine to fine-grained, moderately to well sorted, hard and tight.	4090	4100
As above.	4100	4110
As above.	4110	4120
Sandstone, as above, with some gray-green shale.	4120	4130
Sandstone, as above.	4130	4140
Sandstone, as above.	4140	4150
Trip sample with abundant cavings.	4150	4160
Sandstone, cream-pink, very fine to fine-grained, moderately to well sorted and rounded, hard and tight.	4160	4170
Sandstone, as above, with some light green, light gray, dark shale and siltstone, soft to firm.	4170	4180
As above.	4180	4190
As above.	4190	4200
As above.	4200	4210
As above.	4210	4220
As above.	4220	4230
Sandstone, as above, with abundant loose grains, some shale and siltstone, as above.	4230	4240
As above.	4240	4250
Sandstone, cream-pink, very fine to fine-grained, moderately to well sorted and rounded, hard and tight; with some siltstone and shale, as above.	4250	4260
As above, with abundant free quartz grains.	4260	4270
As above.	4270	4280
As above.	4280	4290
Sandstone, cream-pink, very fine to fine-grained, moderately to well sorted, abundant free grains.	4290	4300
Sandstone, as above.	4300	4310

	FROM	TO
Sandstone, as above, with abundant shale and siltstone, light green, gray, some brown, firm to hard, carbonaceous in part.	4310	4320
As above, with increasing; shale and siltstone, increasing brown.	4320	4330
As above.	4330	4340
Shale and siltstone, fissile in part, mostly brown-red-brown, some green, firm to hard, mottled in part.	4340	4350
Siltstone and shale, as above; with abundant sandstone, cream-pink ?cavings?	4350	4360
As above.	4360	4370
Siltstone and shale, red-red-brown, ferruginous, fissile in part, sandy in part.	4370	4380
As above; with some sandstone, pink-red, abundant free grains.	4380	4390
As above, with less sandstone.	4390	4400
As above.	4400	4410
Siltstone and shale, as above, becoming very silty.	4410	4420
Siltstone and shale, as above, becoming very silty.	4420	4430
Siltstone and shale, as above, becoming very silty.	4430	4440
Siltstone and shale, very silty, brown to red-brown, firm to hard, fissile.	4440	4450
As above.	4450	4460
Siltstone and shale, as above, with some shale, light green, light gray, firm, fissile.	4460	4470
As above.	4470	4480
As above, with less green shale, mottled in part.	4480	4490
Siltstone and shale, red to red-brown, firm to hard, fissile, some green shale, as above.	4490	4500
As above.	4500	4510
Siltstone and shale, red to red-brown, firm to hard, fissile.	4510	4520
Siltstone and shale, as above; with some limestone, white, gummy to chalky, very fine-crystalline, soft to firm.	4520	4530
As above.	4530	4540
Siltstone and shale, as above; with abundant white limestone, as above.	4540	4550
Siltstone and shale, as above; with abundant white limestone, some lavender, mottled.	4550	4560
Siltstone and shale, red to red-brown, dark, very silty, mottled in part, with dark lavender, trace limestone, as above.	4560	4570
As above.	4570	4580
Siltstone and shale, dark red to red-brown, very calcareous, as above; with some sandstone, red to red-brown, subangular, very fine to fine-grained, poorly sorted.	4580	4590
Siltstone and shale, as above, becoming much siltier; some sandstone, with dolomite stain.	4590	4600
As above, with abundant sandstone, white to gray, fine to medium-grained, moderately sorted, abundant dead oil stain.	4600	4610
As above, with decreasing sandstone, as above.	4610	4620
As above, with little sandstone, as above.	4620	4630
Siltstone and shale, dark red to red-brown, very calcareous, silty, firm, fissile; trace white limestone.	4630	4640
As above.	4640	4650
Siltstone and shale, dark red to red-brown, very silty to sandy, firm to hard, very calcareous.	4650	4660
Siltstone and shale, dark red to red-brown, very silty to sandy, firm to hard, very calcareous.	4660	4670
Siltstone and shale, dark red to red-brown, very silty to sandy, firm to hard, very calcareous.	4670	4680
Siltstone and shale, dark red to red-brown, very silty to sandy, firm to hard, very calcareous.	4680	4690
Siltstone and shale, as above, but less silty.	4690	4700

	FROM	TO
As above.	4700	4710
As above, with trace greenish shale.	4710	4720
Siltstone and shale, as above.	4720	4730
As above.	4730	4740
Siltstone and shale, dark red to red-brown, firm to hard, very calcareous, water green shale.	4740	4750
Siltstone and shale, dark red to red brown, fissile, firm to hard.	4750	4760
As above.	4760	4770
As above.	4770	4780
Siltstone, as above; with some shale, light green to light gray, sandy in part, firm, mottled in part.	4780	4790
As above.	4790	4800
As above.	4800	4810
As above.	4810	4820
As above.	4820	4830
As above.	4830	4840
As above.	4840	4850
Siltstone and shale, dark red to red-brown, mottled in part, ferruginous, slightly calcareous, fissile, firm to hard, some light green to light gray shale.	4850	4860
Siltstone and shale, dark red to red-brown, mottled in part, ferruginous, slightly calcareous, fissile, firm to hard, some light green to light gray shale.	4860	4870
Siltstone and shale, dark red to red-brown, mottled in part, ferruginous, slightly calcareous, fissile, firm to hard, some light green to light gray shale.	4870	4880
Siltstone and shale, dark red to red-brown, mottled in part, ferruginous, slightly calcareous, fissile, firm to hard, some light green to light gray shale.	4880	4890
As above.	4890	4900
As above.	4900	4910
As above.	4910	4920
As above.	4920	4930
Siltstone and shale, dark red to red-brown, ferruginous, slightly calcareous, fissile, firm to hard, some light gray to light gray shale; some sandstone, light to dark gray, very fine to fine-grained, moderately sorted, dead oil stain.	4930	4940
As above, with decreasing sandstone.	4940	4950
Siltstone and shale, as above; with some light green to light gray shale, slightly calcareous; some sandstone, white, very fine-grained, calcareous, hard and tight.	4950	4960
As above, with some green sandstone.	4960	4970
Siltstone and shale, dark red to red-brown, slightly calcareous, fissile, decreasing sandstone, as above.	4970	4980
Siltstone and shale, dark red to red-brown, slightly calcareous, fissile, decreasing sandstone, as above.	4980	4990
Siltstone and shale, dark red to red-brown, slightly calcareous, fissile, decreasing sandstone, as above.	4990	5000
Siltstone and shale, dark red to red-brown, firm to hard, slightly calcareous, fissile, ferruginous.	5000	5010
Siltstone and shale, dark red to red-brown, firm to hard, slightly calcareous, fissile, ferruginous.	5010	5020
Siltstone and shale, dark red to red-brown, firm to hard, slightly calcareous, fissile, ferruginous.	5020	5030
Siltstone and shale, dark red to red-brown, firm to hard, slightly calcareous, fissile, ferruginous.	5030	5040
Siltstone and shale, dark red to red-brown, firm to hard, slightly calcareous, fissile, ferruginous.	5040	5050

FARM Sunnyside Unit WELL NO. 1COMPANY Mountain Fuel Supply Company

	<u>FROM</u>	<u>TO</u>
Siltstone and shale, dark red to red-brown, very silty, slightly calcareous.	5050	5060
Siltstone and shale, dark red to red-brown, very silty, slightly calcareous.	5060	5070
As above, but less silty.	5070	5080
Siltstone and shale, as above; with abundant green shale, firm, slightly calcareous.	5080	5090
As above, with some gray shale.	5090	5100
Siltstone, light to dark gray, hard and tight, some red to red-brown, siltstone and shale; sandstone, light gray to dark gray, very fine to fine-grained, hard and tight, silty, poorly to moderately sorted, silty, with dead oil stains.	5100	5110
As above.	5110	5120
Siltstone and shale, dark red to red-brown, fissile, firm to hard; some siltstone and sandstone, as above.	5120	5130
Dolomite, white to gray, oolitic; with interbedded dead oil stains, very fine-crystalline, trip sample, abundant cavings.	5130	5140
Dolomite, as above; and limestone, white to gray, very fine-crystalline, with interbedded dead oil stains, good fluorescence and streaming cut.	5140	5150
Dolomite, good fluorescence and cut; limestone, as above, grading into dolomite, sucrosic to granular, some arenaceous to silty.	5150	5160
As above.	5160	5170
Limestone, as above; dolomite, as above; shale, light gray to gray, hard, silty in part, shale, dark red.	5170	5180
As above.	5180	5190
Limestone, as above; dolomite, as above, pink and red grain inclusion; shale, dark red, soft; calcite, white.	5190	5200
As above; trace gypsum, increasing red shale.	5200	5230
As above.	5230	5240
As above, also purple to red shale.	5240	5250
Shale, red, yellowish-brown, tan, soft, silty in part, slightly calcareous in part.	5250	5260
Shale, brown, tan, chocolate, dark red, soft, silty in part.	5260	5270
As above.	5270	5280
As above.	5280	5290
Shale, red-maroon, soft; anhydrite, white, soft, interbedded.	5290	5300
As above.	5300	5310
As above.	5310	5320
As above.	5320	5330
As above.	5330	5340
As above.	5340	5350
Shale, as above; siltstone, white, coarse-grained, firm, dead oil stain, noncalcareous; trace limestone, pink, hard, dense, micro-crystalline.	5350	5360
As above.	5360	5370
Siltstone, as above; shale, as above; anhydrite.	5370	5380
As above.	5380	5390
Siltstone, black, white, firm, sandy in part, slightly calcareous, dead oil stain; shale, light green, light gray, soft.	5390	5400
Shale, as above; siltstone, as above; dolomite, gray, brownish-gray, hard, micro-crystalline, silty, glauconitic in part.	5400	5410
As above.	5410	5420
As above.	5420	5430
Shale, as above; dolomite, as above.	5430	5440
As above.	5440	5450
As above.	5450	5460

	FROM	TO
Dolomite, gray, firm, abundant micro-crystalline, argillaceous, also black, hard, sucrosic; trace pyrite.	5460	5470
As above.	5470	5480
As above.	5480	5490
Dolomite, as above; limestone, tannish-white, hard, micro-crystalline, dense, also salt and pepper, oolitic in part.	5490	5500
As above.	5510	5550
Dolomite, white, hard, dense, micro-crystalline; trace chert, white, hard, sub-rounded.	5550	5560
As above.	5560	5570
As above.	5570	5580
As above.	5580	5590
As above.	5590	5600
As above.	5600	5610
As above.	5610	5620
As above.	5620	5630
Dolomite, white, clear, firm, friable, sucrosic, arenaceous, selenitic.	5630	5640
N.R.	5640	5650
N.R.	5650	5660
Sandstone, white, very hard, medium-grained, well sorted, quartzitic, tight, sub-rounded to rounded; dolomite, as above.	5660	5670
Sandstone, clear quartz grains, white cement, medium-grained, very hard, well sorted, quartzitic, tight, sub-rounded to rounded, with some brown inclusions.	5670	5680
Sandstone, as above, fine to medium-grained, with some very calcareous.	5680	5690
As above.	5690	5700
As above.	5700	5710
Sandstone, as above, with some unconsolidated grains.	5710	5720
Sandstone, as above.	5720	5730
Sandstone, as above, with many unconsolidated grains.	5730	5740
Sandstone, clear, medium-grained, unconsolidated, sub-rounded.	5750	5760
Sandstone, clear, fine to medium-grained, very hard, tight, quartzitic, well sorted, sub-rounded.	5760	5770
Sandstone, with some unconsolidated grains.	5770	5780
As above.	5780	5790
As above.	5790	5800
As above.	5800	5810
Sandstone, clear, medium to coarse-grained, very hard, tight, quartzitic, subangular to sub-rounded, with some unconsolidated grains.	5810	5820
Sandstone, as above, unconsolidated.	5820	5830
As above.	5830	5840
Sandstone, as above, fine to medium-grained, hard.	5840	5850
As above.	5850	5860
As above.	5860	5870
As above.	5870	5880
As above.	5880	5890
As above.	5890	5900
As above.	5900	5910
As above.	5910	5920
As above.	5920	5930
As above.	5930	5940
As above.	5940	5950
As above.	5950	5960
As above.	5960	5970

	FROM	TO
As above.	5970	5980
As above.	5980	5990
As above, unconsolidated.	5990	6000
As above, unconsolidated.	6000	6010
As above, unconsolidated.	6010	6020
As above.	6020	6030
As above.	6030	6040
As above, unconsolidated.	6040	6050
As above, unconsolidated.	6050	6060
As above, unconsolidated.	6060	6070
As above, unconsolidated.	6070	6080
As above, unconsolidated.	6080	6090
As above, unconsolidated.	6090	6100
As above.	6100	6110
As above.	6110	6120
As above.	6120	6130
As above.	6130	6140
As above.	6140	6150
Sandstone, as above, fine-grained, some unconsolidated.	6150	6160
As above.	6160	6170
As above.	6170	6180
As above.	6180	6190
Sandstone, as above, white, clear, fine-grained, hard, tight, some unconsolidated, ranging to coarse-grained, well sorted, sub-rounded.	6190	6200
As above, unconsolidated.	6200	6210
As above, unconsolidated.	6210	6220
As above, unconsolidated.	6220	6230
As above, unconsolidated.	6230	6240
Sandstone, white, medium-grained, hard, tight, well sorted, sub-rounded.	6240	6250
Sandstone, as above, some unconsolidated	6250	6260
As above.	6260	6270
As above.	6270	6280
Sandstone, as above, some unconsolidated grains.	6280	6290
Sandstone, as above, hard, tight.	6290	6300
Sandstone, as above, unconsolidated.	6300	6310
Sandstone, as above.	6310	6320
Sandstone, as above, unconsolidated.	6320	6330
Sandstone, as above, with some orange.	6330	6340
Sandstone, as above, unconsolidated, sandstone, light orange to orange, hard, very fine-grained, tight, siliceous; siltstone, orange, brown, hard, siliceous, arenaceous.	6340	6350
Sandstone, light orange, orange, brown, white, as above; siltstone, as above.	6350	6360
Sandstone, as above.	6360	6370
Sandstone, orange, red, pink, very fine to medium-grained, sub- angular to rounded, quartzitic.	6370	6380
As above.	6380	6390
As above.	6390	6400
As above; some siltstone, red, soft to firm, some very calcareous.	6400	6410
As above.	6410	6420
As above, partly unconsolidated.	6420	6430
As above, some calcareous.	6430	6440
As above.	6440	6450
Sandstone, partly unconsolidated, pink, orange, red, very fine to medium-grained, subangular to rounded, some clay filled, mostly sandstone in dolomite grains, some calcareous, soft to friable, some arkosic; siltstone, brown, as above.	6450	6460
As above.	6460	6470

	FROM	TO
As above.	6470	6480
No show.	6480	6490
As above; dolomite, pink, dark brown, white, red, hard to soft, some argillaceous.	6490	6500
Sandstone, as above, unconsolidated, as above; siltstone, as above; dolomite, as above.	6500	6510
Sandstone, white, pink, some red, very fine to fine-grained, some medium-grained, partly unconsolidated, soft, friable, some argillaceous; trace shale, green, pink; some siltstone, as above; dolomite, as above.	6510	6520
As above.	6520	6530
Sandstone, as above, with some very large quartz grains; siltstone, as above; some shale, as above; dolomite, as above.	6530	6540
As above.	6540	6550
As above; siltstone, pink, red, soft, friable; shale, green, purple, red.	6550	6560
Sandstone, partly unconsolidated, transparent, white, pink, red, some argillaceous, very fine to fine-grained, some large quartz grains, angular to sub-rounded; some dolomite, some calcareous; siltstone, as above; shale, as above; some calcite; some dark min.; dolomite, pink, purple, dark brown, soft to hard, some argillaceous.	6560	6570
As above.	6570	6580
Dolomite, white, pink, orange, purplish-brown, soft to hard, some dense crystalline; sandstone, white, transparent, pink, red, as above, very dolomitic; chert, white, transparent, red.	6580	6590
As above, very sandy.	6590	6600
As above; some sandstone; with pyrite.	6600	6610
As above.	6610	6620
Sandstone, transparent, pink, red, very fine to fine-grained, subangular to rounded, some large quartz grains, firm to hard, friable, dolomitic; dolomite, pink, orange, white, purple, hard, sandy; chert, brown, orange.	6620	6630
Dolomite, as above, some sandy; sandstone, as above; chert, as above.	6630	6640
As above.	6640	6650
As above; some shale, green, gray, soft.	6650	6660
As above.	6660	6670
Sandstone, partly unconsolidated, transparent, pink, red, orange, very fine to fine-grained, angular to sub-rounded, soft, very dolomitic, some large rounded quartz grains, some dark mineral, dolomite, pink, brown, red, some crystalline.	6670	6680
Dolomite, brown, pink, red, some crystalline, some sandy, soft to firm; sandstone, as above; chert, transparent, tan, yellow, hard.	6680	6690
As above; with some anhydrite.	6690	6700
As above.	6700	6710
As above, with increase in chert, tan, brown.	6710	6720
Dolomite, as above; sandstone, as above; anhydrite; chert, white.	6720	6730
As above, with abundant chert, transparent, tan to brown, gray.	6730	6740
As above.	6740	6750
As above.	6750	6760
Sandstone, partly unconsolidated, transparent, pink, red, very fine to fine-grained, angular to sub-rounded, soft to firm, friable, dolomitic; dolomite, some white, brown, red, pink, orange, gray, very soft to firm, some crystalline; chert, as above.	6760	6770

	FROM	TO
Sandstone, as above; dolomite, as above.	6770	6780
Dolomite, reddish-brown, white, firm, some sandy, crystalline, some non-crystalline; sandstone, reddish-brown, white, soft to firm, very fine to fine-grained, subangular to sub-rounded, very dolomitic.	6780	6790
As above.	6790	6800
Dolomite, light gray, white, as above; some sandstone, as above; chert, gray, brown.	6800	6810
Dolomite, reddish-brown, gray, brown, as above; sandstone, as above; chert, as above.	6810	6820
Sandstone, transparent, pink, very fine to fine-grained, angular to rounded, some large quartz grains, partly unconsolidated, soft, friable, dolomitic; dolomite, as above; chert, as above.	6820	6830
As above; with trace pyrite.	6830	6840
As above, fine to medium-grained.	6840	6850
Sandstone, white, transparent, partly unconsolidated, angular to rounded, some large quartz grains, soft, friable, very dolomitic, mostly sandstone in dolomite fragments; dolomite, white, transparent, pink, reddish/brown, some black, crystalline; chert, transparent, white, gray, brown, pink, hard.	6850	6860
As above.	6860	6870
Sandstone, as above.	6870	6880
Dolomite; sandstone, as above.	6880	6900
As above.	6900	6910
As above; with abundant chert, white, tan, hard.	6910	6920
As above.	6920	6930
Dolomite, sandstone, white, pink, gray, orange, very fine to fine-grained, partly unconsolidated, angular to rounded, sandstone in dolomite fragments, some large quartz grains; dolomite, white, orange, brown, pink, gray, hard to soft; abundant chert, white, tan, red; trace shale, purple, massive, soft.	6930	6940
As above.	6940	6950
As above; with chert, transparent, orange, pink, tan.	6950	6960
As above.	6960	6970
As above.	6970	6980
As above.	6980	6990
As above.	6990	7000
As above.	7000	7010
Dolomite, sandstone; white, pink, orange, as above.	7010	7020
As above.	7020	7030
As above.	7030	7040
Dolomite, sandstone, white, pink, brown, firm to soft, crystalline; dolomite, brown, white, crystalline, some with dark inclusions.	7040	7050
As above.	7050	7060
Dolomite, sandstone, red, transparent, pink, brown, very fine to medium-grained, angular to rounded, firm to soft; sandstone, grains are dolomite fragments.	7060	7070
As above.	7070	7080
As above.	7080	7090
As above.	7090	7100
As above.	7100	7110
As above.	7110	7120
As above; trace chert, light gray.	7120	7130
As above.	7130	7140
As above.	7140	7150
As above.	7150	7160

FARM Sunnyside Unit WELL NO. 1COMPANY Mountain Fuel Supply Company

	FROM	TO
As above; dolomite, gray, massive, micro-crystalline, firm.	7160	7170
Dolomite; sandstone, as above.	7170	7180
As above.	7180	7190
As above.	7190	7200
Dolomite; sandstone, as above; dolomite, as above; trace shale, dark red, hard, massive.	7200	7210
Dolomite; sandstone, as above; dolomite, gray, as above.	7210	7220
As above.	7220	7230
Dolomite; sandstone, partly unconsolidated, reddish-brown, pink, transparent, gray, very fine to fine-grained, silty, angular to rounded, some large quartz grains; sandstone grains are dolomite fragments; dolomite, gray, white, transparent, micro-crystalline, hard.	7230	7240
As above.	7240	7250
As above.	7250	7260
As above.	7260	7270
As above.	7270	7280
As above; with some shale, red, soft.	7280	7290
Dolomite, gray, white, transparent, pink, micro-crystalline, soft to firm; dolomite; sandstone, gray, pink, white, as above.	7290	7300
As above.	7300	7310
Dolomite; sandstone, as above; dolomite, as above.	7310	7320
As above.	7320	7330
Dolomite; sandstone, as above; some dolomite.	7330	7340
As above, with abundant chert, gray, with orange inclusions.	7340	7350
As above; with some chert.	7350	7360
Dolomite; sandstone, as above; dolomite, as above; some chert, gray; trace shale, purple, gray, firm.	7360	7370
Dolomite; sandstone, white, gray, pink, some reddish-brown, green, some with green-gray inclusions, partly unconsolidated, angular to rounded, very fine to fine-grained, some quartz grains; sandstone grains are dolomite fragments; some dolomite, as above; trace shale, purple, soft.	7370	7380
As above.	7380	7390
As above.	7390	7400
Dolomite; sandstone, white, transparent, reddish-brown, very fine to fine-grained, some silty size, angular to rounded; sandstone grains are dolomite fragments; some dolomite, gray, as above; trace shale, red, gray, green, soft to firm.	7400	7410
As above.	7410	7420
As above.	7420	7430
As above.	7430	7440
As above.	7440	7450
As above.	7450	7460
As above.	7460	7470
As above.	7470	7480
Siltstone, red, brown, firm, slightly dolomitic; some dolomite sandstone, as above.	7480	7490
As above.	7490	7500
Dolomite; sandstone, white to transparent, some pink dolomite, silty in part, micro-crystalline, firm, abundant loose grains.	7500	7510
Dolomite; sandstone, white to pink to transparent, very fine to fine-grained, well sorted, grains are dolomite, some red to red-brown siltstone.	7510	7520
As above, with decreasing siltstone.	7520	7530
As above.	7530	7540

	FROM	TO
Dolomite sandstone, as above, with increasing red to red-brown siltstone, as above.	7540	7550
As above, with siltstone becoming dominant.	7550	7560
As above.	7560	7570
Siltstone, red to red-brown; some dolomite sandstone, as above, some green, firm to hard, very dolomitic, sandy in part.	7570	7580
As above.	7580	7590
As above, with increasing dolomite sandstone.	7590	7600
Sandstone, pink, medium to coarse-grained, friable to loose grains, poorly sorted, with abundant dolomite, as above.	7600	7610
As above.	7610	7620
As above, becoming slightly arkosic.	7620	7630
Sandstone, as above, becoming silty, red to red-brown.	7630	7640
As above.	7640	7650
Siltstone, red to red-brown, sandy in part, firm, very dolomitic, poorly sorted; some white dolomite sandstone, as above.	7650	7660
As above.	7660	7710
Siltstone, red to red-brown, sandy in part, firm to hard, very dolomitic, poorly sorted.	7710	7720
Siltstone, as above, with trace shale, light to dark gray, firm, some black, fissile, very dolomitic.	7720	7730
As above, with increasing shale, as above.	7730	7740
Siltstone, red to red-brown, sandy in part; shale, light to dark gray, firm to hard, fissile.	7740	7750
As above, with dolomite, tan, gray, dark gray, very fine-crystalline, hard, fissile.	7750	7760
As above, with abundant loose sandstone grains, quartz, clear, fine to medium-grained; trace black shale.	7760	7770
Siltstone, red to red-brown, firm to hard, very dolomitic; trace dark shale.	7770	7780
As above.	7780	7800
Siltstone, red to red-brown, firm to hard, very dolomitic, some sandy; trace dark shale.	7800	7810
Siltstone, as above; with some green shale.	7810	7820
Siltstone, as above, becoming very limy.	7820	7830
As above.	7830	7840
As above, with siltstone decreasing.	7840	7850
As above.	7850	7870
As above, with abundant free sandstone grains, fine to medium-grained gtt, moderately rounded, very sorted; less siltstone, as above.	7870	7880
Dolomite, white, gray, crystalline, abundant free sandstone grains, very limy; some limestone, tan to gray, very fine-crystalline.	7880	7890
As above.	7890	7900
Dolomite, white to cream to pink, hard, very fine-crystalline, sandy in part; siltstone, red to red-brown, as above.	7900	7910
As above.	7910	7940
As above, with abundant free sandstone grains.	7940	7950
As above.	7950	7980
As above, becoming very limy.	7980	7990
Limestone and dolomite, tan to gray to white, hard, very fine-crystalline, dense, chalky in part; trace crystalline selenite.	7990	8000
As above.	8000	8050
As above, with selenite.	8050	8060
Limestone and dolomite, as above; with selenite, as above; with some shale, green, firm, waxy.	8060	8070
As above.	8070	8080

	FROM	TO
Trip sample, not representative.	8080	8090
Limestone and dolomite, tan, white, gray, hard, dense, very fine-crystalline, chalky in part, selenite; some green shale, firm to hard, waxy in part.	8090	8100
As above.	8100	8110
Limestone and dolomite, as above, with abundant selenite.	8110	8120
As above, with abundant selenite.	8120	8130
Limestone and dolomite, with decreasing selenite.	8130	8140
As above.	8140	8150
Limestone and dolomite, as above, with crystalline selenite.	8150	8160
Dolomite (80%) and limestone (20%), tan, gray to white, hard and dense, chalky in part, very fine-crystalline, additional selenite.	8160	8170
As above.	8170	8190
Dolomite (90%) and limestone (10%), tan to gray, hard and dense, very fine-crystalline.	8190	8200
As above, with abundant selenite.	8200	8210
As above.	8210	8230
As above, with limestone decreasing.	8230	8240
As above.	8240	8260
Dolomite, light gray to white, hard, dense, porosity increasing.	8260	8270
Dolomite, white to pink, fine-crystalline, sucrosic, good vis porosity.	8270	8280
As above.	8280	8290
As above, becoming all white to pink.	8290	8300
Dolomite, light gray to white, hard, dense, with visible porosity, very fine to fine-crystalline.	8300	8310
As above.	8310	8360
Dolomite, light gray to white, hard, dense to sucrosic, with vis porosity, very fine to fine-crystalline.	8360	8370
As above.	8370	8420
Dolomite, white to light gray, hard, dense to sucrosic, with some visible porosity, very fine fine-crystalline.	8420	8430
As above.	8430	8440
As above, with trace white chert.	8440	8450
Dolomite, white to cream, hard, dense to sucrosic, with visible porosity, very fine to fine-crystalline; some white chert.	8450	8460
Dolomite, as above; with increasing white chert.	8460	8470
As above.	8470	8500
Dolomite, white to cream, with some pink, hard, dense to sucrosic, with visible porosity, very fine to fine-crystalline.	8500	8510
As above.	8510	8550
Trip sample, abundant cavings, not representative.	8550	8560
Dolomite, white to cream, hard, dense to sucrosic, with visible porosity, very fine to fine-crystalline; with some white chert.	8560	8570
As above.	8570	8600
Dolomite, white to cream, hard, dense to sucrosic, with visible porosity, very fine to fine-crystalline, granular; with some white chert.	8600	8610
As above.	8610	8670
Dolomite, white, light gray, cream, hard, dense, very fine-crystalline, sucrosic in part.	8670	8680
As above, with occasional chert, white.	8680	8690
As above.	8690	8770

FIELD Wildcat SEC. 17 T. 15 S. R. 13 E. PAGE 23
 FARM Sunnyside Unit WELL NO. 1
 COMPANY Mountain Fuel Supply Company

	<u>FROM</u>	<u>TO</u>
As above, with some limestone, white, soft, bentonitic; trace dolomite, argillaceous, interbedded with dolomite, as above; trace selenite, clear.	8770	8780
As above.	8780	8790
As above, trace algae.	8790	8800
As above.	8800	8830
Dolomite, white, cream, brownish-orange, hard, fine-crystalline, micro-crystalline, some sucrosic, dense; trace shale, green.	8830	8840
As above.	8840	8870
Dolomite, as above, increasing in orangish-red, with abundant glauconitic inclusions (Devonian).	8870	8880
As above, becoming more siltstone; trace selenite.	8880	8890
As above, trace shale, gray, brown, firm, waxy, trace selenite.	8890	8900
As above.	8900	8910
As above; sandstone, white, gray, very fine-grained, hard, tight, with some glauconitic inclusions; selenite.	8910	8920
As above.	8920	8930
Dolomite, as above; sandstone, as above, dolomitic.	8930	8940
Dolomite, as above; sandstone, as above, with decreasing glauconitic; shale, gray, hard, with black inclusions, waxy.	8940	8950
Sandstone, clear, white, very fine to medium-grained, hard, with black inclusions in part, tight, angular to subangular; shale, gray, black, greenish-gray, firm, waxy, micaceous, silty in part; dolomite, as above; selenite.	8950	8960
As above.	8960	8970
Sandstone, as above, with some large black inclusions and very glauconitic in part, some very micaceous; shale, as above.	8970	8980
As above.	8980	9000
Shale, as above; sandstone, as above; selenite.	9000	9010
As above.	9010	9020
As above; trace sandstone, clear, hard, tight, quartzitic, angular; abundant loose quartz grains; selenite.	9020	9030
As above.	9030	9040
Sandstone, clear, fine to coarse-grained, hard, tight, quartzitic, angular, fractures across sand grains.	9040	9050
As above.	9050	9060
As above, with abundant unconsolidated quartz grains.	9060	9070
As above.	9070	9080
Feldspar, milky white, pale orange, firm, crystalline; quartz clear, white, very hard, interstitial pyroxene, with some horn blend; trace biotite mica.	9080	9090
As above.	9090	9140

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved,
Budget Bureau No. 42-R142

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 type="checkbox"/> OTHER <u>Wildcat</u>	
2. NAME OF OPERATOR <u>Mountain Fuel Supply Company</u>	
3. ADDRESS OF OPERATOR <u>P. O. Box 1129, Rock Springs, Wyoming 82901</u>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) <u>At surface</u> <u>1980' FEL, 1980' FSL, NW SE</u>	
14. PERMIT NO. <u>-</u>	15. ELEVATIONS (Show whether DF, RT, CR, etc.) <u>KB 5863.60' GR 5846'</u>

5. LEASE DESIGNATION AND SERIAL NO. <u>Fee Land</u>	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME <u>Sunnyside Unit</u>	
8. FARM OR LEASE NAME <u>Unit Well</u>	
9. WELL NO. <u>1</u>	
10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u>	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>NW SE 17-15S-13E., SLB&M</u>	
12. COUNTY OR PARISH <u>Carbon</u>	13. STATE <u>Utah</u>

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 COMPLETION <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"/>	(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.)*

TD 9158', rig released January 6, 1971, well plugged and abandoned as follows:

- Plug No. 1: 8500-8400', 40 sacks
- Plug No. 2: 7850-7750', 40 sacks
- Plug No. 3: 5200-5100', 40 sacks
- Plug No. 4: 4400-4300', 40 sacks
- Plug No. 5: 3600-3500', 40 sacks
- Plug No. 6: 1800-1700', 40 sacks
- Plug No. 7: 1000- 900', 70 sacks
- Plug No. 8: 10- 0', 10 sacks

Installed a regulation abandonment marker, location will be cleaned at a later date.

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

SIGNED [Signature] TITLE Vice President, Gas Supply Operations DATE Jan. 12, 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 THE DATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

Fee Land

6. IF INDIAN, ALLEGED 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

Sunnyside Unit

8. FARM OR LEASE NAME

Unit Well

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

NW SE 17-15S-13E, S1B&M

12. COUNTY OR PARISH 13. STATE

Carbon Utah

1. OIL WELL GAS WELL OTHER Wildcat

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

1980' FEL, 1980' FSL NW SE

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB 5863.60' GR 5846'

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF PULL OR ALTER CASING
 FRACTURE TREAT MULTIPLE COMPLETE
 SHOOT OR ACIDIZE ABANDON*
 REPAIR WELL CHANGE PLANS
 (Other)

WATER SHUT-OFF REPAIRING WELL
 FRACTURE TREATMENT ALTERING CASING
 SHOOTING OR ACIDIZING ABANDONMENT*
 (Other) Supplementary history
 (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 9158', rig released January 6, 1971.
 DST #5: 7990-8080', Desert, IO 1/2 hour, ISI 1 1/2 hours, FO 2 hours, FSI 3 1/2 hours, opened with strong blow decreasing to moderate, reopened very weak, no gas to surface, recovered 300' gas and water cut mud, and 6050' gas cut water.
 IHP 3770, IOFP's 1663-2878, ISIP 2880, FOFP's 2880, 2880, FSIP 2880, FHP 3790.
 Verbal approval was granted by Mr. G. R. Daniels on January 4, 1971 to plug and abandon the subject well as follows:
 Plug No. 1: 8500-8400', 40 sacks
 Plug No. 2: 7850-7750', 40 sacks
 Plug No. 3: 5200-5100', 40 sacks
 Plug No. 4: 4400-4300', 40 sacks
 Plug No. 5: 3600-3500', 40 sacks
 Plug No. 6: 1800-1700', 40 sacks
 Plug No. 7: 1000- 900', 70 sacks
 Plug No. 8: 10- 0', 10 sacks

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

SIGNED R. M. Daniels TITLE Vice President, Gas Supply Operations DATE Jan. 12, 1971

(This space for Federal or State office use)

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

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 Sunnyside Unit Well No. 1

Operator Mountain Fuel Supply Company Address P. O. Box 11368, SLC Phone 328-8315

Contractor Loffland Brothers Drilling Co. Address Farmington, N.M. Phone _____

Location NW ¼ SE ¼ Sec. 17 T. 15 N R. 13 E Carbon County, Utah

Water Sands:

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	DST 7990'	8080'	Rec. 6050'	Salt Water
2.				
3.				
4.				
5.				

(Continue on reverse side if necessary)

Formation Tops:

Ferron	1370'	Morrison	2050'	Navajo	3565'	Upper Moenkopi	4573'
Tununk	1450'	Summerville	2546'	Kayenta	3866'	Sinbad	5135'
Dakota	1726'	Curtis	2808'	Wingate	3950'	Lower Moenkopi	5200'
Cedar Mountain	1746'	Entrada	2930'	Chinle	4350'	Kaibab	5504'
Buckhorn	2015'	Carmel	3270'	Shinarump	4526'	Coconino	5640'
						Elephant Canyon	6340'

Remarks:

*Continued on Back

- 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.

REPORTING OF FRESH SANDS.

It shall be the duty of any person, operator or contractor drilling an oil or gas well or drilling a seismic, core or other exploratory hole to report to this office all fresh water sands encountered; such report shall be in writing and give the location of the well or hole, the depth at which the sands were encountered and the thickness of such sands, and the rate of flow of water if known.

If no fresh water sands are encountered, it is requested that a negative report to that effect be filed.

*Formation Tops (cont.):

Hermosa	6950'	Devonian	8880'
Manning Canyon	7390'	Cambrian	8950'
Deseret	7820'	Granite	9090'
Madison	8480'		

JAN 12 1971

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.

5. LEASE DESIGNATION AND SERIAL NO.

Fee Land

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Sunnyside Unit

8. FARM OR LEASE NAME

Unit Well

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

NW SE 17-15S-13E., S1B&M

12. COUNTY OR PARISH
Carbon

13. STATE
Utah

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
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 1980' FEL, 1980' FSL NW SE

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPOOLED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RSB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

11-3-70

1-3-71

1-6-71

KB 5863.60'

GR 5846'

-

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D. MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

9158'

0'

0

0-9158'

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

Dry and abandoned

No

26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED

Dual Induction Laterolog, Borehole Sonic, Sidewall Neutron

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	61	1008	17-1/2	1250	0

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.	
INTERVAL	SIZE	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)	
D & A							
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

DIL, Borehole Sonic, Sidewall Neutron, 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 [Signature] TITLE Vice President, Gas Supply Operations DATE Jan. 14, 1971

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

COMPLETION REPORT

Well: Sunnyside Unit Well #1 Date: January 22, 1971

Area: Sunnyside Lease No: Utah 9549 Fee

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

Location: 1980 feet from east line, 1980 feet from south line
NW $\frac{1}{4}$ SE $\frac{1}{4}$

Section 17, Township 15 S., Range 13 E.

County: Carbon State: Utah

Operator: Mountain Fuel Supply Company

Elevation: KB 5863.6' Gr 5846' Total Depth: Driller 9161' ^{*9158'} Log 9165'

Drilling Commenced: November 3, 1970 Drilling Completed: January 3, 1971

Rig Released: January 6, 1971 Well Completed: January 6, 1971

Sample Tops: (unadjusted)

Log Tops:

SEE PAGE 2

SEE PAGE 2

Sample Cuttings: 10' dry cut surface to total depth
10' wet cut surface to total depth

Status: Plugged and Abandoned

Producing Formation: None

Perforations: None

Stimulation: None

Production: None

Plug Back Depth: None

Plugs: #1 8500'-8400'; #2 7850'-7750'; #3 5200'-5100'; #4 4400'-4300'; #5 3600'-3500';
#6 1800'-1700'; #7 1000'-900'; #8 10'-0'

Hole Size: 17-1/2" to 1020'; 8-3/4" from 1020' to total depth

Casing/Tubing: 13-3/8" - 1008' with 1250 sacks type G cement

Logging - Mud: Dolco Geo-Engineering Surface to Total Depth

Mechanical: BHCS-GR from 1008' to 9163'; SNPL from 4450' to 5950';
DIL (2" linear, 5" logarithmic) from 1008' to 9159'

Contractor: Loffland Brothers Drilling Company

Completion Report Prepared by: Paul D. Ludwig

Remarks: *9158' Total Depth reported to U.S.G.S. by Rock Springs

COMPLETION REPORT (cont.)

Well: Sunnyside Unit Well #1

Area: Sunnyside

Sample Tops: (unadjusted)

Mancos	Surface	Chinle	4320'
Ferron	1340'	Shinarump	4450'
Tununk	1443'	U. Moenkopi	4470'
Dakota	1728'	Sinbad	5135'
Cedar Mt.	1746'	L. Moenkopi	5191'
Buckhorn	2000'	Coconino	5655'
Morrison	2038'	Elephant Canyon	6350'
Summerville	2560'	Hermosa	7072'
Curtis	2803'	Manning Canyon	7727'
Entrada	2920'	Deseret	7986'
Carmel	3270'	Madison	8444'
Navajo	3560'	Devonian	8874'
Kayenta	3838'	Cambrian	8948'
Wingate	3970'	Granite	9090'

Logs Tops:

Mancos	Surface	Shinarump	4526'
Ferron	1370'	U. Moenkopi	4573'
Tununk	1450'	Sinbad	5135'
Dakota	1726'	L. Moenkopi	5200'
Cedar Mt.	1746'	Kaibab	5504'
Buckhorn	2015'	Coconino	5640'
Morrison	2050'	Elephant Canyon	6340'
Summerville	2546'	Hermosa	6956'
Curtis	2808'	Manning Canyon	7390'
Entrada	2930'	Deseret	7820'
Carmel	3270'	Madison	8480'
Navajo	3565'	Devonian	8880'
Kayenta	3866'	Cambrian	8950'
Wingate	3950'	Granite	9090'
Chinle	4350'		

COMPLETION REPORT (cont.)

Well: Sunnyside Unit Well #1

Area: Sunnyside

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	2504'-2534'	1223	27-28 (34)	53 (56)	36-32 (60)	50 (90)	1207	None	Very weak blow, NGTS, Rec. 5' Mud Weak blow incr. to strong blow, *GTSI 23 min. of 2nd flow, NETG, Rec. 90' Mud
2	5092'-5134'	2414	37-32 (31)	1558 (91)	46-57 (92)	1551 (180)	2418	Gas	
3	5135'-5175'	2445	27-27 (32)	1569 (92)	25-29 (181)	1562 (317)	2444	None	Strong blow thruout, *GTSI 25 min. of 2nd flow, NETG, Rec. 15' sl GCM Very weak blow thruout, NGTS, Rec. 5' Mud.
4	5361'-5419'	2575	16-18 (29)	66 (59)	18-16 (63)	16 (98)	2580	None	
5	7990'-8080'	3772	1661-2922 (31)	2925 (89)	2931-2931 (120)	2931 (211)	3787	Water	Strong blow decreasing to very weak, NGTS, Rec. 300' sl G & WCM, 6050' sl GC salt water

* Low Btu Gas

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE
LEASE NUMBER
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Carbon Field Sunnyside

The following is a correct report of operations and production (including drilling and producing wells) for the month of JAN 1971, 19.....

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

Salt Lake City, Utah 84111 Signed E. 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)
					Utah 9549 Fee Land					
NW SE 17	15S	13E	1							Spud Nov. 3, 1970 Dry and abandoned 1-6-71 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.

August 23, 1971

Mountain Fuel Supply Company
Box 11368
Salt Lake City, Utah 84111

Re: Sunnyside Unit #1
Sec. 17, T. 15 S, R. 13 E,
Carbon County, Utah

Gentlemen:

The above referred to well was inspected on August 12, 1971, and found in a satisfactory condition with the proper identification marker. Liability under Bond No. 74 28 17, with the Seaboard Surety Company, is hereby released.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd

P.S. It would be appreciated if you would notify your surety company.