

Land Office **Salt Lake**

Lease No. **00404**

Unit **Tenasale**

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY.

7 21 48

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17

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 1, 1948

Well No. 1 is located 330 ft. from N line and 2310 ft. from E line of sec. 17

17 30 N 6 E Salt Lake  
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Tenasale Dome Wasco Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~ground~~ floor above sea level is 7783 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

In order to test the unmined Tenasale structure it is proposed to drill the number 1 well as follows:

Set approximately 290' of 13-5/8" casing into the top of the Kaibab limestone and cement same to surface.

Set and cement 5-5/8" at approximately 3000' into top of Pennsylvania if required.

Set and cement 5-1/2" at about 6700' if required to protect the Brigham consistency. (SEE ATTACHED RIDER FOR APPROVAL)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PACIFIC WESTERN OIL COMPANY, INC.

Address 11 South Center Street

Garrett, Wyoming

By [Signature]  
J. A. BENTLEY  
Title Division Superintendent

CONDITIONS OF APPROVAL

1. The lessee or operator shall mark the derrick or well in a conspicuous place with the name of the operator, well number, the land office and serial number of the lease, and location of the well and shall take all necessary precautions to preserve these markings.
2. A conductor or surface string of casing shall be run and cemented from bottom to surface unless other procedure is expressly authorized by this approval. The conductor or surface string shall be of sufficient weight and length and have installed thereon the proper and necessary high pressure fittings and equipment to keep the well under control in case an unexpected flow of gas, oil or water is encountered.
3. All showings of oil or gas are to be adequately tested for their commercial possibilities. All showings shall be properly protected by mud, cement, or casing so that each showing will be confined to its original stratum. Necessary precautions shall be taken to prevent waste or damage to other minerals drilled through and the U. S. Geological Survey, upon request, shall be furnished with carefully taken samples of such minerals as coal, potash and salt.
4. Lessee's Monthly Report of Operations (Form 9-329) shall be filed in duplicate with the office of the U. S. Geological Survey, P. O. Box 400, Casper, Wyoming, not later than the sixth of the succeeding month. The report should show for this well any change of status occurring within the particular month such as date drilling commenced, suspended, resumed or completed, total depth as of the end of the month, and if shut down the reason therefor.
5. Two copies of the log of this well on Form 9-330, or other acceptable form and ~~where available~~ two copies of all electrical logs, directional, diameter and temperature surveys of the hole shall be filed with the district engineer within 15 days after such information is received by operator or completion of the well whichever is earlier.
6. The District Engineer, C. A. Hauptman, 306 Federal Building, Salt Lake City 1, Utah, shall be notified on Form 9-331a in triplicate giving thereon all necessary details of the proposed operation or test for proper consideration and action sufficiently in advance of making casing or formation tests, sheeting or acidizing, running or cementing casing, other than the surface or conductor string, to permit approval of the notice prior to date of proposed work.

Approved SEP 20 1948

*C. A. Hauptman*  
District Engineer

# Subsequent Report of Abandonment

FILE NOTATIONS	
Entered in N I D File _____	Checked by Chief _____
Entered On S R Sheet _____	Copy N I D to Field Office _____
Location Map Pinned _____	Approval Letter _____
Card Indexed <input checked="" type="checkbox"/>	Disapproval Letter _____
I W R for State or Fee Land _____	
COMPLETION DATA:	
Date Well Completed <u>10-7-49</u>	Location Inspected _____
OW _____ WW _____ TA _____	Bond released _____
GW _____ OS _____ PA <input checked="" type="checkbox"/>	State of Fee Land _____
LOGS FILED	
Driller's Log <input checked="" type="checkbox"/>	
Electric Logs (No. ) _____	
E _____ I _____ E-I _____ GR _____ GR-N _____ Micro _____	
Lat _____ Mi-L _____ Sonic _____ Others _____	

Teasdale

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

OIL OR GAS WELL

Pacific Western Oil Corporation 331 So. Center St., Casper, Wyo.

Field Teasdale State Utah

Well No. 1 Sec. 17 T. 30N R. 6E Meridian Salt Lake County Wayne

Location 330 ft. (S.) of N. Line and 2310 ft. (W.) of E. Line of Sec. 17 Elevation 7838 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Original Signed

Signed J. A. DEFVEYES

J. A. Defveyes

Date Sept 7 1949

Title Division Superintendent

The summary on this page is for the condition of the well at above date.

Commenced drilling October 10 1945 Finished drilling August 7 1949

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from ... to ... No. 2, from ... to ... No. 3, from ... to ... No. 4, from ... to ... No. 5, from ... to ... No. 6, from ... to ...

IMPORTANT WATER SANDS

No. 1, from ... to ... No. 2, from ... to ... No. 3, from ... to ... No. 4, from ... to ...

CASING RECORD

Table with columns: Size casing, Weight per foot, Threads per inch, Make, Amount, Kind of shoe, Cut and pulled from, Perforated (From, To), Purpose. Includes handwritten entry '270' and 'Ballburton'.

MUDDING AND CEMENTING RECORD

Table with columns: Size casing, Where set, Number sacks of cement, Method used, Mud gravity, Amount of mud used. Includes handwritten entry '13-3/8 270 300 Ballburton'.

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set
Adapters—Material Size

SHOOTING RECORD

Table with columns: Size, Shot used, Explosive used, Quantity, Date, Depth shot, Depth cleaned out.

FOLD MARK

FOLD MARK

PLUGS AND ADAPTERS

Heaving plug—Material

Length

Depth set

Adapters—Material

Size

SHOOTING RECORD

Shot	Quantity	Date	Depth shot	Depth cleaned out

feet and from (set to feet

feet to feet, and from feet to feet

DATES

19

Aug. 7, 1949

The production for the first 24 hours was barrels of fluid of which % was oil; %

gasoline % water; and % sediment.

Gravity, °Bé.

Gas well cu. ft. per 24 hours

Gallons gasoline per 1,000 cu. ft. of gas

Test pressure, lbs. per sq. in.

EMPLOYEES

POOR COPY

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
			See attached sample log.

(OVER)

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidecracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or drilling.

Date	Work done
<u>1948</u>	
Oct.	
10	Spudded about 6 AM
15	Ran 13-3/8" OD casing and cemented at 270' w/300 sacks by Halliburton.
17	Drilled out cement and started making new 12 1/2" hole.
24	Attempted DST, 660-785, not enough weight to set packer.
Nov.	
14	Attempted DST, 1853-1903, packer failed to hold.
15	DST (#3), 1901-1937, open 30 minutes, no blow at surface and no recovery.
26	Rig shut down for repairs, hole bottomed at 2305'.
Dec.	
11	Rig repaired and drilling resumed.
<u>1949</u>	
Jan.	
4	Shut rig down at midnight at depth of 3556' and suspended operations until spring.
April	
23	Resumed operations
29	Struck pipe at 3849'.
May	
2	Unable to work pipe loose--started string shooting in attempt to back-off.
5	Shot pipe off at 2694'.
6	Started washing over.
30	Shut down for rig repairs.
June	
19	Finished repairing rig.
July	
5	Finished washing over and milling up junk--started drilling ahead.
Aug.	
5	Reached TD of 4930'.
6	Ran Schlumberger electric log. Started plugging.
7	Plugged as follows: 25 sacks 4500-4530'; 25 sacks - 3300-3334'; 25 sacks - 1500-1527'; 20 sacks - 270-295'; 10 sacks - 10' to surface.
8	Rig torn out and released at 4 PM.

Rig repair time of less than 24 hours duration not reported.  
 Had trouble with lost circulation from 1337' to TD, spent an average of nearly 2 hours per day mixing and conditioning mud.

17-308-6E TEASDALE (UNIT) - Wayne County  
NW NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Pacific Western Oil Corp. Well No. 1  
(Salt Lake 064644), Ref. No. 1

X STATUS: Abd - T.D. 4930', Leadville OCT 1949

REMARKS: Waiting on final inspection.

17-308-6E TEASDALE (UNIT) - Wayne County  
NW NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Pacific Western Oil Corp. Well No. 1  
(Salt Lake 064644), Ref. No. 1 NOV 1949

X STATUS: Abd - T.D. 4930', Leadville (Visited 11-29-49)

REMARKS: Location inspected 11-29-49 and found to be  
satisfactory. Waiting on final report.

17-308-6E TEASDALE (UNIT) - Wayne County  
NW NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Pacific Western Oil Corp. Well No. 1  
(Salt Lake 064644), Ref. No. 1

X STATUS: P&A - T.D. 4930' DEC 1949

REMARKS: Abandonment approved 12-30-49.

17-308-6B **TEASDALE (UNIT) - Wayne County**  
 NW ~~NE~~<sup>NE</sup><sub>4</sub>, Pacific Western Oil Corp. Well No. 1 (Salt Lake  
 064644), Ref. No. 1  
 MAY 1949  
 STATUS: Drg - T.D. 3849', Madison (Co. reports, visited  
 5-25-49)  
 REMARKS: Fishing entire month for stuck drill pipe. Still  
 fishing.

17-308-6E **TEASDALE (UNIT) - Wayne County**  
 NW ~~NE~~<sup>NE</sup><sub>4</sub>, Pacific Western Oil Corp. Well No. 1 (Salt  
 Lake 064644), Ref. No. 1  
 JUN 1949  
 STATUS: Drg - T.D. 3849', Madison (Co. reports)  
 REMARKS: Still fishing for stuck drill pipe.

17-308-6E **TEASDALE (UNIT) - Wayne County**  
 NW ~~NE~~<sup>NE</sup><sub>4</sub>, Pacific Western Oil Corp. Well No. 1  
 (Salt Lake 064644), Ref. No. 1  
 JUL 1949  
 STATUS: Drg - T.D. 4451', Madison (Co. reports)  
 REMARKS: Recovered fish. Drilling ahead in practically  
 pure limestone.

17-308-6E **TEASDALE (UNIT) - Wayne County**  
 NW ~~NE~~<sup>NE</sup><sub>4</sub>, Pacific Western Oil Corp. Well No. 1  
 (Salt Lake 064644), Ref. No. 1  
 AUG 1949  
 STATUS: Abd - T.D. 4930', Suvendian (Co. reports)  
 REMARKS: ~~SEE HOLD ON FAILURE~~. Drilling ceased 8-5-49,  
 without finding commercial oil or gas. 25-cms cement  
 plugs spotted 4500-4478', 3000-2965', 1980-2000',  
 20 sax 260-235', inside 13-3/8" casing, and 18 sax  
 at surface. Marker erected. Lowest tested, Suvendian  
 top estimated 4005'. Location not yet cleaned up.

17-308-6E **TEASDALE (UNIT) - Wayne County**  
 NW ~~NE~~<sup>NE</sup><sub>4</sub>, Pacific Western Oil Corp. Well No. 1  
 (Salt Lake 064644), Ref. No. 1  
 SEP 1949  
 STATUS: Abd - T.D. 4930', Leadville

REMARKS: Waiting on inspection of location. Tests:

Strat	Surface
Leadville	194'
Kadish	194'
Osceola	194'
Hessman	1942'
Leadville	3316'

Lowest tested Leadville (1942') Corrected

17-30S-6E TRASDALE (UNIT) - Wayne County  
NW ~~NE~~ ~~NE~~, Pacific Western Oil Corporation Well No. 1  
(Salt Lake 064644), Ref. No. 1 OCT 1948  
STATUS: Drg - T.D. 1186', Cocozino (Co. reports)  
REMARKS: SEE DRILLING LOG. Drilling commenced 10-10-48.  
surface, and deeper group. Objective, formations down to  
and including Ordovician at approx. 6500'. 271' 1-3/8"  
w/300 sax.

17-30S-6E TRASDALE (UNIT) - Wayne County  
NW ~~NE~~ ~~NE~~, Pacific Western Oil Corporation Well No. 1  
(Salt Lake 064644), Ref. No. 1 NOV 1948  
STATUS: Drg - T.D. 2305', Hermosa (Visited 11-23-48  
Co. reports)  
REMARKS: Top of Hermosa tentative 1542'. D.S.T. Nos. 1 and  
2 failed to hold. D.S.T. No. 3 with packer at 1901' open  
30 min. No blow. No recovery. Hermosa extremely tight,  
almost zero porosity. Fractures at 1901-2001' in cores  
give evidence of light oil shows.

(CONFIDENTIAL)  
17-30S-6E TRASDALE (UNIT) - Wayne County  
NW ~~NE~~ ~~NE~~, Pacific Western Oil Corporation Well No. 1  
(Salt Lake 064644), Ref. No. 1 DEC 1948  
STATUS: Drg - T.D. 3489', Miss. (Co. report)  
REMARKS: Tentative top Mississippian 3216'.

17-30S-6E TRASDALE (UNIT) - Wayne County  
NW ~~NE~~ ~~NE~~, Pacific Western Oil Corporation Well No. 1  
(Salt Lake 064644), Ref. No. 1 JAN 1949  
STATUS: DST - T.D. 3556', Miss. (Co. reports)  
REMARKS: Operations shut down due to weather. Will drop

17-30S-6E TRASDALE (UNIT) - Wayne County  
NW ~~NE~~ ~~NE~~, Pacific Western Oil Corp. Well No. 1 (Salt Lake  
064644), Ref. No. 1 APR 1949  
STATUS: Drg - T.D. 3800' (Co. reports)  
REMARKS: ON 4-23-49. Running H. Preparing to run 2-1/8"  
casing to 3800'.

Box 23  
Lam, Utah  
June 5, 1949

Mr. Raymond Giering  
Pacific Western Oil Corporation  
311 South Center Street  
Casper, Wyoming

Mr. Earl Korth  
Pacific Western Oil Corporation  
1060 Selway Technical Building  
Los Angeles 13, California

Re: Pacific Western #1 Borehole  
Wayne County, Utah

Dear sirs:

Week ending June 4, 1949

A report of continued fishing operations is outlined in the rooms below.

- May 28 Caught fish with overbit at approximately 12:00 noon, after spotting 1200 gallons of diesel oil at bit at 5400 A. M. (Notes: Fish consists of drill-collar, 47.10 feet; sub, 1.05 feet; bit, .79 feet; total, 48.94 feet. TD 5400 feet.) Jammed on fish. Clutch failed to hold; it became impossible to release overbit from fish. Driller Wilson put in positive pins (one of these effective) to circumvent clutch ~~brake-drum~~ brake and tore out wire line.
- May 29 Released from fish at approximately 3:00 P.M. Started taking out brake-drum at about 8:00 P.M. Ended in pickup preparatory to taking to Wichita Falls at 7:30 A.M. May 30.
- May 30 Waiting arrival of repaired brake drum to  
June 4

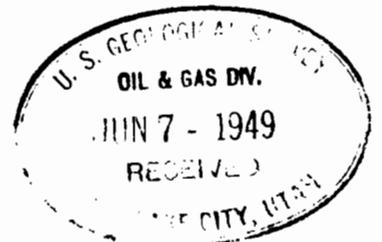
cc: Mr. Staples  
Mr. Evans  
Mr. Hyman  
Mr. Hauptmann ✓

Sincerely,

*Janner*

Otis Janner

SD for repairs since May 29  
Done on 6/14  
Finished 6-27-49



# Pacific Western Oil Corporation

ROCKY MOUNTAIN DIVISION

311 SOUTH CENTER STREET  
CASPER, WYOMING

-2-

The following points are listed as a brief summary of the above.

For the period 8:00 a.m. July 1, 1949 through 8:00 a.m. July 23, 1949

1. Location: Section 17-18, T30S, R6E.
2. Elevation: Ground 7681 Kelly Bushing 7639
3. Total Depth: 4451
4. Postage: 908'
5. Formations encountered: Leadville Limestone
6. Formation tops: None
7. Core: None
8. Drill Stem Tests: None
9. Survey Elogs Tests: Eastman @ 3514 2 degrees  
Eastman @ 4194 2 degrees  
Eastman @ 4420 1½ degrees
10. Current Mt: 974, 19 feet in 2 hours, incomplete.
11. Size hole: 1½"
12. Hours spent drilling: 208 hours.
13. Average drill time: 30 minutes per foot.

Yours truly,

---

U. J. Booth

c.c. Mr. G. M. Brown  
Mr. Edith Kluth  
Mr. Charles Hoptman  
Mr. Ed Johnson

# Pacific Western Oil Corporation

ROCKY MOUNTAIN DIVISION  
311 SOUTH CENTER STREET  
CASPER, WYOMING



August 8, 1949

064644

## MEMORANDUM:

To: Mr. Raymond Charney  
From: W. J. Scott

Re: Pacific Western Oil Corporation Well #1, Fenestale Unit, Wayne County, Utah.

Dear Sir:

The past eight days have been very eventful and have seen circumstances arise which resulted in the abandonment of the well.

The week started in a routine manner, the first three days seeing 147' of new hole drilled in approximately 45 hours drilling time. At this point the lithology was running approximately the same as before, with the samples showing an increase in dolomite and impure dolomitic limestones. Somewhere in the interval 4980 to 4990, a change in samples was noted with a dark green, platy shale and a buff-brown colored finely sandy dolomite being predominant. The shale content in samples from 4910 to 4925 was probably as high as 80%.

On August 2, 1949, the morning tour pulled the drill pipe to change bits and when the daylight tour was almost back on bottom with the new bit, mud circulation was completely lost. Every effort was made to regain the circulation with no success. Approximately 5000 barrels of new mud composed of Aqua-gal and Fiber-tex was pumped in the hole along with dry fiber-tex being dumped directly into the hole. At one point, the hole was filled and approximately 80% of the mud was returning to the surface. The drill pipe was run in the hole and a bridge encountered at about 4000'. When this bridge was drilled up, circulation was again lost. When the holly was broken off, a terrific section of air down the drill pipe was noted, indicating a very bad case of lost circulation. Approximately three and one-half days were spent in trying to regain circulation. A small amount of this time was lost in waiting for water which had to be hauled four miles up the mountain, and for new mud materials which has to be brought from Price, Utah.

On August 5, a core was cut in the interval 4928-4930. This was accomplished by mixing a full pit of mud and cutting the core until the pit was emptied. At no time during the cutting of the core, was there any returns of mud to the surface, nor was there any pressure build-up on the mud pumps. Two feet of core was recovered as follows. Shale, very dark green, massive to finely sandy, brecciated appearance with large angular buff-brown limestones and white dolomitic fragments irregularly included in the shale matrix. Very badly fractured with all fractures running vertically and filled with secondary calcite. No evidence of slickensiding noted on the fracture surfaces.



# Pacific Western Oil Corporation

ROCKY MOUNTAIN DIVISION  
311 SOUTH CENTER STREET  
CASPER, WYOMING



August 8, 1949

**MURKIN:**

To: Mr. Raymond Shorrey  
From: W. J. Scott

Re: Pacific Western Oil Corporation Well No. 1, Fremont Unit, Wayne County, Utah.

Dear Sir:

The past eight days have been very eventful and have seen circumstances arise which resulted in the abandonment of the well.

The work started in a routine manner, the first three days seeing 147' of new hole drilled in approximately 45 hours drilling time. At this point the lithology was running approximately the same as before, with the samples showing an increase in dolomite and impure dolomitic limestones. Somewhere in the interval 4000 to 4010, a change in samples was noted with a dark green, platy shale and a buff-brown colored finely sandy dolomite being predominant. The shale content in samples from 4010 to 4020 was probably as high as 50%.

On August 3, 1949, the morning tour pulled the drill pipe to change bits and when the daylight tour was almost back on bottom with the new bit, mud circulation was completely lost. Every effort was made to regain the circulation with no success. Approximately 5000 barrels of new mud composed of Aqua-gal and Fiber-tex was pumped in the hole along with dry Fiber-tex being dumped directly into the hole. At one point, the hole was filled and approximately 20% of the mud was returning to the surface. The drill pipe was run in the hole and a bridge encountered at about 4000'. When this bridge was drilled up, circulation was again lost. When the hully was broken off, a terrific section of air down the drill pipe was noted, indicating a very bad case of lost circulation. Approximately three and one-half days were spent in trying to regain circulation. A small amount of this time was lost in waiting for water which had to be hauled four miles up the mountain, and for new mud materials which had to be brought from Price, Utah.

On August 5, a core was cut in the interval 4000-4020. This was accomplished by mixing a full pit of mud and cutting the core until the pit was emptied. At no time during the cutting of the core, was there any returns of mud to the surface, nor was there any pressure build-up on the mud pump. The feet of core was recovered as follows. Shale, very dark green, massive to finely sandy, brecciated appearance with large angular buff-brown limestones and white dolomitic fragments irregularly included in the shale matrix. Very badly fractured with all fractures running vertically and filled with secondary calcite. No evidence of slickensiding noted on the fracture surfaces.

064604

# Pacific Western Oil Corporation

ROCKY MOUNTAIN DIVISION

311 SOUTH CENTER STREET

CASPER, WYOMING

On August 6, a Schlumberger Electrical Survey was run and the interval 2500 to 4500 was recorded. The running of the survey further indicated the scope of the lost circulation problem on the well. When the core was pulled from the hole, it was noted that the fluid was standing approximately 250' from the surface. The Schlumberger was run approximately eight hours after this and at this time it was noted that the fluid was standing at approximately 2500' from the surface.

It was decided to abandon the well and on August 6, with 4 1/2" open end drill pipe hanging at 4500', 25 sacks of construction cement was mixed and pumped in the hole. The cement was in place at 2:45 p.m. After standing 2 1/2 hours, the top of the cement plug was located at 4475'. A 25 sack cement plug was placed in the hole at 2500'. The top of this plug was not felt for, but is estimated to be at approximately 2525'. This plug was in place at 2:35 p.m. A similar 25 sack cement plug was placed at 1500', with the estimated top at 1475. This was in place at 2:10 a.m., August 7. A fourth plug was placed at 200', inside the 15 1/2" surface casing, with the estimated top of the plug being at 225', having used 20 sacks of cement. On the same day the casing equipment was dismantled and a 10 sack cement plug placed at the surface. A steel plate was welded on top with a 10 foot meter pipe indicating the location of the hole. This last step officially abandoned the well.

The following points are listed as a brief summary of the above.

1. Location: Section 17-18, T20N, R5E.
2. Elevation: Ground 7281 Holly Bushing 7280
3. Total Depth: 4920
4. Footage: 140' (period 8:00 a.m. July 20th through August 7th.)
5. Formations Encountered: Mississippian and Devonian.
6. Formation Tops: Possible top of Devonian 4505 (Schlumberger)
7. Cores: 4525-4520. Recovered 2'. Shale, very dark green, massive to finely sandy, brecciated appearance with large angular buff-brown limestones and white dolomitic fragments irregularly included in the shale matrix. Very badly fractured with all fractures running vertically and filled with secondary calcite. No evidence of slickensiding noted on fracture surfaces.
8. Drill Stem Tests: None
9. Survey Slip Tests: None

# Pacific Western Oil Corporation

ROCKY MOUNTAIN DIVISION  
311 SOUTH CENTER STREET  
CASPER, WYOMING

10. Size hole: 1 $\frac{1}{4}$ " to 4020; 7 $\frac{1}{2}$ " 4020 to 4020.
11. Hours spent drilling: 48
12. Average drill time: 18.1 minutes per foot. (For last 147' only.)
13. Number of bits used in drilling well: 26
14. Abandonment plugs:
  - (a) 25 feet 4020-4070, top located.
  - (b) 25 feet 3000-3020, estimated top.
  - (c) 25 feet 1800-1875, estimated top.
  - (d) 20 feet 2000-2020, estimated top.
15. Well abandoned August 7, 1949 at a total depth of 4020' having reached the Eocene.

Yours very truly,

---

V. J. Scott

c.c. E.T. Staples, Los Angeles  
G.M. Evans, Los Angeles  
H. Knuth, Los Angeles  
C. Hampton, U.S.G.S. Salt Lake  
H. Ismael, Moab, Utah.

TEASDALE OIL FIELD  
PACIFIC WESTERN OIL CORPORATION  
#1 Teasdale Well

660' south and 1980' West of W. 1/4  
Section 17-18, T8S., R6E.,  
Wayne County, Utah

ELEVATION: 7831' (GR)  
7837' (SP)  
7837' (R)

SAMPLE LOG

DESCRIPTION

FROM TO

SLC 064044

SINBAH

- 0 40 Limestone - buff to brown with trace of red coloring, good vugular porosity.
- 40 85 Limestone - buff, yellowish-buff, and gray, dense, hard, shows little fracturing and secondary mineralization.
- 85 95 Limestone - yellow, shaly, earthy appearing, micaceous.

MOENKOEI

- 95 140 Shale - gray, dense, limey, hard, micaceous, grading to gray shaly lime. Lime is hard and dense.
- 140 154 Shale - light dove-gray, soft.

KARBAB

- 154 240 Chert - white, hard, opaque with traces of white lime. Some sub-opaque, some crystalline quartz, all slightly unstained in part.
- 240 292 Chert - white and buff, hard, opaque and sub-opaque with some crystalline quartz. Trace of glauconite and mud iron-staining.
- 292 350 Sandstone - light buff, quartzose, fine-grained, slight visible porosity, even-textured and sub-rounded grains, loose, quite friable, little cementing.
- 350 360 Sandstone - light buff, quartzose, medium-grained, porous, some irregularity of grain, grains are sub-rounded, loose friable with little cementing.
- 360 370 Sandstone - yellowish buff from iron-staining, fine-grained, little porosity, even-textured, sub-rounded grains, loose, friable, little cementing.
- 370 470 Sandstone - ditto, with increasing number of larger grains embedded in finer sand matrix.
- 470 552 Sandstone - white and yellowish buff, fine to medium grained, no visible porosity. Grains are sub-rounded and show some irregularity of size. Quartzose. Drills fast.
- 552 580 Limestone - gray, hard, largely dense, some having good vugular porosity. Exceedingly light residual stain. Some layers gray soft shale.
- 580 605 Sandstone - gray, hard, limey grading to sandy limestone, some crystalline calcite, little visible porosity, slightly pyritic.
- 605 650 Sandstone - white, clear, quartzose, loose, friable, occurring as individual grains, grains are rounded to sub-rounded and show irregularity of size, fine to medium grained.
- 650 660 Sandstone - as above with black dead oil residual staining, cuttings fluoresce dark brown or not all under ultra violet, gives dark brown fluorescent ring when cut with carbon-tetrachloride.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
660	666	Sandstone - white, clear, quartzose, loose, friable, grains are rounded to sub-rounded, poorly sorted, fine to medium-grained.
666	701	Sandstone - as above, with heavy dead staining, cuttings discolor to dark brown and give positive low gravity test when cut with carbon tetrachloride.
705	710	Sandstone - green, shaly, hard, pyritic, fine-grained, fair sorting, sub-rounded grains.
710	730	Sandstone - white, clear, quartzose, loose, friable, grains are rounded to sub-rounded, fairly well sorted. Left residue on pit.
Drill Stem Test #1 - Packer at 666 TD 730. Insufficient weight to expand packer. No test.		
730	780	Sandstone - white, clear, quartzose, loose, friable, grains are fine, well-sorted, sub-rounded.
780	805	Sandstone - as above with dead oil or carbonaceous staining. Upper limit undeterminable. No samples.
805	810	Sandstone - green, very shaly, fine-grained to silty in size. Shale 50% of mass.
810	840	Sandstone - light buff, clear, quartzose, loose, friable, grains show little irregularity of size and are sub-rounded.
840	880	Sandstone - light green, shaly, no porosity, pulverent, drilled slow.
860	930	Sandstone - light buff, clear, quartzose, loose, friable, grains show poor sorting, sub-rounded.
930	935	Sandstone - light green, shaly, no porosity, pulverent.
935	945	Sandstone - iron-stained, medium grained, soft, quartzose, poor sorting, with sub-rounded grains, porosity probably good.
945	1020	Sandstone - buff, clear, quartzose, loose, friable, grains are fine and show fair sorting.
1020	1080	Sandstone - clear, quartzose, loose and unconsolidated, grains, are fine to medium, sub-rounded to well-rounded, and show poor sorting. Drilled fast.
1080	1148	Sandstone - clear, quartzose, loose and unconsolidated in cuttings, grains are fine to medium-grained, sub-rounded to rounded, with poor sorting microscopically.
<u>CORED</u>		
		Core #1 1148 - 1158 Recovered 8 1/2 / 10'
		Sandstone - white in hard specimen, clear microscopically, fine-grained, quartzose, no visible porosity, grains are sub-rounded to rounded, are fairly well sorted microscopically. Upper four feet has well developed dip of 13° and lower 4 1/2' shows none. May represent cross-bedded section.
<u>SHALY</u>		
		Sandstone - white macroscopically, fine to medium grained, shaly, friable, and very friable, shaly, are slightly greenish, show some irregularity of grain, grains are sub-rounded to rounded with little foreign grain type.
		Sandstone - white and light gray, fine to medium grained, friable, shaly cementing; increased irregularity of grain, grains are sub-rounded; quartzose, some quartz grains show red and rust colored staining. Little foreign grain type.

FROM	TO	DESCRIPTION
1205	1220	Sandstone - white and buff, macroscopically, fine to coarse grained, unconsolidated, poorly sorted, sub-rounded grains, rust stained grains, quartzose. Drilled about 12 minutes per foot.
1220	1240	Sandstone - white to slightly buff-colored, fine to coarse grained, friable and unconsolidated, evidence of white pulverent gypsiferous cementing, poor sorting of sub-rounded grains, quartzose, clear and some rust colored grains present, little foreign mineral present. Drilled 20 minutes per foot.
1240	1260	Sandstone - buff, fine to coarse-grained, friable to hard with much unconsolidated sand; poorly sorted, sub-rounded grains; quartzose with some increase in ferric oxide staining, trace of gypsum.
1260	1270	Sandstone - gray to buff, fine to coarse-grained, unconsolidated in cuttings, shaly cementing; poorly-sorted-sub-rounded grains, quartzose with some ferric oxide staining. Drilled about 18 minutes per foot.
1270	1280	Sandstone - gray and grayish-green, fine-grained, hard, shaly cementing with high shale content; fairly well-sorted subrounded grains; quartzose.
1280	1290	Sandstone - buff, fine-grained, cuttings entirely unconsolidated, probably shaly cementing; little irregularity of grain, grains are sub-rounded quartzose with ferric oxide staining, Drilled 15 minutes per foot.
1290	1295	Sandstone - as above, with increase in coarse grain content.
1295	1310	Sandstone - clear, coarse grained, unconsolidated in cuttings with probably shaly cementing; fair-sorting of sub-rounded grains; quartzose.
1310	1325	Sandstone - buff macroscopically fine to coarse-grained, unconsolidated in cuttings; grains are poorly-sorted and sub-rounded quartzose with trace of ferric oxide staining.
1325	1340	Sandstone - buff to red from increased ferric oxide content with about a foot of shale and hematitic rouge at top, grains are unconsolidated to consolidated with shaly and ferric oxide cementing. Grains are medium to coarse-grained and sub-rounded; quartzose. Drilled 15 minutes per foot. Ferric oxide occurs as hematitic shale, red shale, hematitic rouge, limonite, and ferruginous sandstone.
1340	1370	Sandstone - white and reddish-white, fine to coarse-grained, unconsolidated in cuttings; grains are poorly sorted and sub-rounded; quartzose with some ferric oxide staining.
1370	1395	Sandstone - white to whitish-buff, fine-grained, unconsolidated; grains are sub-angular to sub-angular but well-sorted for size; quartzose with some ferric oxide discoloration of grains.
1395	1417	Sandstone - white to yellowish-buff, fine to coarse-grained, increase in consolidated cuttings, calcareous cementing; grains are sub-angular to sub-rounded; quartzose with increase in hydrous ferric-oxide staining. Drills much slower - about 35 minutes per foot.
1417	1427	Recovered 7½/10'
1427	1427	Sandstone - white, and buff from ferric oxide staining, fine-grained, no visible porosity, fairly hard except where washing has removed calcareous cementing; grains are well-sorted, and sub-rounded to sub-angular; quartzose with vertical fracturing, trace of black crystalline ferromanganese mineral.

1482		Sandstone - light gray, yellowish buff from hydrous ferric oxide staining. Fine-grained, no visible porosity, hard and well-consolidated, calcareous cementing; grains are well-sorted and sub-angular to sub-rounded; quartzose. Drilled 30"/ft.
1488		Sandstone - light gray to light green, fine-grained, no visible porosity, hard and well-consolidated, calcareous cementing; grains are fairly well-sorted and are sub-angular to sub-rounded; quartzose with some ferric oxide staining.
1480	1490	Sandstone - white, and white with slight greenish cast, fine-grained, no visible porosity, hard and well-consolidated, calcareous cementing; grains are fairly well-sorted and are sub-angular to sub-rounded; quartzose, slightly pyritic. Drilled 30"/ft.
1490	1500	Sandstone - white and yellowish-buff, fine-grained, no visible porosity, hard and well-consolidated, calcareous cementing to limy; grains are fairly well-sorted and sub-angular to sub-rounded, quartzose, hydrous ferric oxide staining. Drilled 30"/ft.
1500	1510	Sandstone - white, yellowish-buff, and light green, otherwise as above. Note - very minute glauconite content.
1510	1520	Sandstone - light yellowish buff, fine-grained, visible porosity, hard and consolidated, calcareous; grains are sub-angular to rounded, matrix of fine grains, well-sorted with few medium-sized grains of well-rounded sand embedded; quartzose, hydrous ferric oxide staining, trace of ferromanganese mineral.
1528	1542	Sandstone - greenish-gray, fine-grained, no porosity, hard and consolidated, limy with about 50% sand, 50% hard limestone; grains of sand are well-sorted and angular to sub-rounded.
1542	1550	Limestone - buff, yellowish-buff, buff with green and pink casts, slight vugular porosity, very sandy in part, dolomitic, trace of selenite gypsum, finely crystalline to coarsely crystalline in small vugs.
1550	1562	Sandstone - greenish-gray, fine-grained, no porosity, hard and consolidated, limy, grains are fair-sorted, sub-angular to sub-rounded; quartzose, trace of hydrous ferric oxide staining, trace of muscovite mica.
1562	1570	Dolomite - pink, medium crystalline, slight vugular, sandy in part, little vug structure.
1570	1605	Limestone - light gray, hard, dense, no visible porosity, has appearance of pure carbonate.
1605	1620	Sandstone - grayish-buff, fine to coarse-grained, unconsolidated in entirety; fair sorting, sub-angular to angular grains, quartzose.
1620	1632	Sandstone - buff, fine to medium-grained, unconsolidated in entirety, fair sorting, sub-angular to sub-rounded grains, quartzose with little hydrous ferric oxide staining.
1632	1642	Limestone - light gray to white, dense to micro-crystalline, hard with little vugular porosity, slightly sandy in part. Sand is fine-grained, quartzose, well-rounded, well-sorted.

FROM	TO	DESCRIPTION
1641	1650	Limestone - light gray to light gray with greenish cast, dense, hard, no visible porosity. slight increase in sandiness. Sand is fine-grained, quartzose, well-rounded, well-sorted.
1650	1660	Sandstone - light to medium-gray, dense, hard, limy as gradational phase from limestone above. very fine-grained, well-sorted, sub-rounded grains, pyritic. Individual cuttings are exceedingly hard, Pyrite is disseminate fairly evenly through the sandy ground mass.
1660	1670	Sandstone - light gray to light gray with slight greenish cast, fine-grained, no visible porosity, individual cuttings are hard from limy cementing; grains are well-sorted and sub-rounded to sub-angular; slightly micaceous from small content of unevenly disseminate but fairly large mica flakes; slightly pyritic with some pyrite oxidized in the groundmass to unrecognizable blobs of black mineral, pyrite content in general somewhat less than above; quartzose. Some pieces somewhat more limy fluoresce as yellow-gold color. Drilled unevenly, but averaged about 35 minutes/ft.
1670	1680	Sandstone - light gray to white, trace of ferric oxide staining giving red color. Fine to coarse-grained, no visible porosity with individual cuttings, hard from limy cementing; grains in ground mass are fine and generally well-sorted with some coarse well-rounded grains embedded, gives appearance of coarsening of grain size, some grains are discolored to pink with internal inclusive coloring, some darker from usual transparency but no distinguishable shade of color, muscovite and pyrite content, considerably lessened, quartzose. Drilled 25 to 30 minutes/ft.
1680	1690	Sandstone - light gray, very fine-grained, no visible porosity, individual cuttings very hard with increasing lime content in cementing; well-sorted, sub-rounded to sub-angular grains; quartzose; slightly pyritic with unevenly disseminated small crystals; some stringers of gray and tan, hard, dense limestone. Sand and lime content in "sandstone" about evenly divided, with lime stringers causing preponderance of limestone in section.
1690	1700	Sandstone - light gray to gray with greenish cast, the latter coloring giving cuttings the appearance of hard, sandy shale, macroscopically, very fine-grained, no visible porosity: cuttings very hard with heavy limy cementing; grains are well-sorted, sub-rounded to sub-angular; quartzose, slightly pyritic with very small crystals of well-disseminated mineral, slightly and finely micaceous with muscovite. Average drill time about 25 minutes/ft.
1700	1710	Sandstone - as above at top grading to a greenish-gray, coarser-grained sandstone; and grading further to layered reddish-tinged, medium-grained sandstone. Latter sandstone is fairly friable in individual cuttings, probably increasing porosity with less limestone and tendency to shale cementing, and is loose and friable. More limy section at top has slight chalcopyrite content, trace glaucinite, and few pieces of gray, sub-opaque, splintery chert, section drilled about minutes per foot on average.
1710	1726	Sandstone - light gray, fine to coarse-grained, largely loose and unconsolidated, lessening of limy cementing; grains are fairly well sorted and are sub-rounded to sub-angular; quartzose, some ferric-oxide staining and little sulphide. No evidence of red, layered coloring because of unconsolidated nature, but undoubtedly present to some degree. Note core below.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
<u>CORED</u>		
		Core #3 1726 - 33 Recovered 9½/10
1726	1733	Sandstone - pink and light yellowish-buff from light ferric oxide staining in both hydrous and anhydrous forms, fine-grained, some visible porosity, very hard -- resisted pressure of hammer; calcareous cementing with a great lessening of lime content, well-sorted, sub-angular to sub-rounded grains; quartzose, most of coloring occurring in layers with red in minority, little interval inclusive coloring of grains, but most external, some smoky coloring. No determinable structural dip.
1733	1736	Limestone - greenish-gray, hard, dense, no porosity, sandy with arenaceous constituent about 25% of mass, slightly glauconitic in part, pyritic with good dissemination of fine cubic crystals thin green smooth shale partings. No determinable structural dip.
<u>DRILLED</u>		
1736	1740	Limestone - greenish-gray, little buff colored, dense, hard, with no evidence of crystallinity; slightly sandy, micaceous, pyrite, extremely light glauconite content, buff limestone occurring probably as layers or nodules.
1740	1760	Limestone - as above, with increase in buff limestone content.
1760	1770	Limestone - greenish-gray, buff-colored limestone content as above, individual cuttings are hard and resist breakage, no evidence of crystallinity; slightly sandy, finely disseminated/in many of cuttings, glauconitic. Sand present is fine to coarse-grained and is sub-rounded with poor sorting.
1770	1790	Sandstone - greenish gray and yellowish-buff, probably layered, fine-grained, no visible porosity, heavy limy cementing; grains are fairly well-sorted and sub-angular to sub-rounded; quartzose. Limestone content about 50% or slightly less. Samples dirty. Drilled 10 to 15 minutes per foot.
1790	1800	Limestone - light and medium-gray, light buff to tan, dense, hard, no porosity, no evidence of crystallinity, slightly sandy, very slightly glauconitic. trace of finely disseminated brassy pyrite.
1800	1820	Limestone - light creamy buff, dense, individual cuttings are slightly softer, no porosity, no evidence of crystallinity, very slightly scattered glauconitic content. Drilled about 9 minutes per foot on average.
1820	1830	Limestone - as above, and white, hard sandstone. Sandstone is fine-grained, well-sorted, has well-rounded grains, hard, no visible porosity, and probably occurs in four layers.
1830	1845	Limestone - light gray, light buff, trace of greenish-tinged, hard, dense, no visible porosity, slightly glauconitic and slightly sandy in part, trace of brassy pyrite.
1845	1855	Sandstone - light gray, fine-grained, no visible porosity, hard in individual cuttings, heavy limy cementing; grains are well-sorted and sub-rounded; quartzose. Stringers of buff, white, hard, dense limestone.
1855	1885	Limestone - light gray, trace of reddish-pink, hard, dense, no visible porosity, scattered blebs and layers of residual oil with no indescence. Some layered sandstone as above.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
1885	1901	Limestone - light buff to tan, hard, dense, slight layered vugular porosity from 1884 - 86 and 1896 - 99. rest of section without porosity, residual staining. Fluoresces brown under ultra-violet.  Drill Stem Test #2 TD 1901 Packer set 1858 failed to hold. Packer 1848, failed to hold. No test.
<u>CORED</u>		
		Core #4 1901 - 1919 Recovered 18/18
1901	1914	Limestone - light gray, hard, dense, sandy, micaceous, slightly pyritic. Black in irregular blebs and layers throughout with residual oil. Has slight gassy or petroliferous odor. Has deep brown fluorescence of dead oil under ultra-violet light. 1906 - 08 cored fast with no indicated increased porosity in samples.
1914	1919	Limestone - light gray, hard, dense, sandy, slightly micaceous, increasingly pyritic. Embedded sand is fine-grained, quartzose, well-rounded, well-sorted. Has small plug of green, smooth, slightly sandy, slightly micaceous shale at bottom.  Core #5 1919 - 1937 Recovered 8/18'
1919	1925	Limestone - dark gray to black from included pieces of residual oil, hard, dense, no porosity. Fluoresces brown under ultra-violet. No determinable structural dip.
1925	1927	Limestone - light gray, hard, dense, no porosity.
1927	1937	Limestone and sandstone - No recovery in this section. Cutting samples (1930-40) and drill time indicate preponderance of sandstone with residual staining, fair porosity. odor. 95% of cuttings have black and deep brown staining with deep brown fluorescence under ultra-violet.  Drill Stem Test #3 TD 1937. Cone packer at 1901. Open 30 minutes. No blow at surface. No recovery.
<u>DRILLED</u>		
1937	1975	Sandstone - white and brown with dead staining, slight trace of greenish-tinged, fine-grained, limy; well-sorted sub-rounded to sub-angular grains. Fluoresces brown under ultra-violet, showed no live oil. Greenish-tinged sandstone is more silty, limey and micaceous. Streaks of limestone throughout with sandstone in majority. Some samples dirty.
1975	1990	Limestone - buff, hard, dense, very slight visible porosity.
1990	1993	Limestone - gray, hard, dense, little live staining on calcite, little or no porosity, no permeability. Circulates at 1993 on 3 feet soft drilling. Core below indicates source of live oil as small calcitic vugs.
<u>CORED</u>		
		Core #6 1993 - 2008 Recovered 14/15'
1993	2008	Limestone, buff gray, trace pink, hard, dense, no porosity with exception of small calcitic vug at approximately 2000 containing little live black oil, no other porosity, permeability nil. Irregular blebs of residual oil throughout. Poorly developed vertical fracturing cuttings shows some staining on calcite. Odor.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
<u>DRILLED</u>		
2008	2020	Limestone - buff, hard, dense, minute traces of live staining around small penpoints of porosity. No permeability. Drilled hard.
2020	2030	Limestone - buff, hard, dense, traces of penpoint staining.
2030	2054	Limestone - buff and white, hard, dense traces of residual staining, trace of pyrite. Circulate at 2054 on 3 feet of fast drilling.
2054	2080	Limestone - buff and white, quite soft, most of section showed no porosity, circulation samples at 2077 showed some good vugular porosity, no show or odor.
2080	2100	Limestone - white, drilled fast. individual cuttings are soft, dense, no porosity.
2100	2150	Limestone - buff, hard, dense, no porosity. Trace of greenish tinged limestone with some clinging pieces of green, micaceous shale, indicating partings of this material at top.
2150	2161	Limestone - buff, trace of pink and green, dense to microcrystalline, hard, dolomitic, no porosity or show. Circulate on soft drilling at 2161. No show, some fair vugular porosity.
2161	2175	Limestone - pink, deep pink, dense, dolomitic, trace vugular porosity. Some white, soft chalky limestone.
2175	2180	Limestone - white, pink, deep pink, dense to fine-grained, dolomitic, trace of glauconite, some chalky limestone, and trace of greenish-tinged, hard, dense limestone with trace of embedded sand grains.
2180	2185	Limestone - white, dense to fine-grained, dolomitic, some show of vugularity. Drilled slow. Some vugular porosity indicated by slight speed-up of drill time at 2185.
2185	2195	Limestone - pink, white, dense to medium, dolomitic. Crystalline trace of vugular porosity with no indication on drill time. Drilled uniformly slow. Trace glauconite.
2195	2205	Limestone - pink and white, dense to fine and medium crystalline, dolomitic, fair, vugular porosity, trace of sand embedded. Sand is fine-grained, quartzose, well-rounded and well-sorted.
2205	2225	Limestone - white, trace pinkish-white, dense to microcrystalline dolomitic trace of embedded glauconitic sand, trace of white opaque chert. Sand is fine-grained quartzose, well-rounded, well-sorted, well-disseminated.
2225	2240	Limestone - white and light pinkish-white, dolomitic, principally white, dense, increasingly sandy, no indicated porosity, cherty. Chert is white and light gray, opaque. Sand is fine-grained, quartzose; well-rounded, well-sorted, well-disseminated throughout. Trace of chalky limestone, soft and friable, especially at 2235 with soft drilling. Average drilling time about 10 minutes per foot.
2240	2255	Limestone - white, dense, hard, sandy, cherty. Sand is fine-grained, quartzose, well-sorted, well-rounded. Chert is white and light gray, opaque, and increasingly abundant. Averaged 14 minutes per foot.
2255	2270	Limestone - ditto above with increasing sand content. Sand is slightly coarser than above, and includes some grains with red inclusive coloring in addition to clear ones. Also contains some very fine pieces brassy pyrite fairly well disseminated, distinguishable only under high power. Becomes pink colored <small>base was cherty in whole section. Averaged about</small>

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
2270	2290	Sandstone - white, pinkish-white, fine-grained, no discernible porosity, well-cemented with limy cementing; grains are fine, well-sorted, rounded to sub-angular, quartzose, and show some internal inclusive coloring, very minute traces of glauconite. Drilled 30 minutes per foot; made trip, and then averaged 10 minutes per foot. Lost circulation at 2290. Drilled slowly ahead.
2290	2303	Sandstone - drilling ahead in this section without returns in attempt to regain circulation. No returns. Probably a sand. Average drilling time about 4 minutes per foot.
<u>CORED</u>		
	Core #7	2303 - 2305 Recovered $\frac{1}{2}$ '
2303	2305	Limestone - green, dense, hard, no porosity, silty, micaceous. Silt is very fine-grained, quartzose, well-sorted, sub-angular, mica is in small flakes - quite abundant; some ferro-manganese grains present in silt; trace of small pieces of glauconite. Green shale partings. Structural dip of 13°.
Sidewall cores by Homco		
2288		No recovery
2289		No recovery
2290		No Recovery
2291		Sandstone - White, very limy, fine-grained, grains are well rounded. Trace of pyrite. No shows, no discernible porosity.
2292		No recovery
2293		No recovery
2294		No recovery
2296		No Recovery
2297		Sandstone - reddish-buff, white, some stringers of green; grains are sub-rounded to well-rounded, no discernible porosity, limy, slightly pyritic, slightly micaceous.
2298		Sandstone - ditto above.
2299		Sandstone - ditto above.
2300		Sandstone - gray-buff, fine-grained; well-sorted, sub-rounded grains; slightly pyritic and micaceous.
2301		Sandstone - grayish, white with some buff-tinged from iron-oxide staining, fine-grained, limy, slight visible porosity; grains are sub-rounded and well-sorted; quartzose, some mica and trace pyrite. Pyrite is well disseminated. No odor or show.
2305	2330	Sandstone - white, light gray, trace of green and little light buff, fine-grained, no visible porosity; grains are sub-rounded to sub-angular and well-sorted; cherty, chert is greenish-tinged, white and gray, opaque, some slightly sandy and pyritic. Sandstone has varying degree of lime content - grading in layers to white and pink limestone, microcrystalline, with slight to fair vugular porosity.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
2330	2350	Limestone - white, pinkish-white, fine to micro-crystalline, dolomitic, fair vugular porosity, cherty. Chert is white, light gray, opaque, quite abundant. Sandstone layered - white, buff, fine-grained, limy, few colored grains present; bulk of grains are sub-rounded, well-sorted; no visible porosity, no show.
2350	2355	Limestone & Sandstone - as above, with limestone slightly increased in quantity. Sandstone is green, fine-grained, pyritic, no visible porosity; grains are sub-rounded to sub-angular; chert intermixed as above, some showing some porosity.
2355	2375	Limestone - white, pink and trace of red-pink, finely crystalline, dolomitic, good vugular porosity, no show. Trace sandstone present but a minor constituent. Sandstone present is green with some red colored grains otherwise as above. Chert present but less than above.
2375	2385	Limestone - white, pink, rose-pink, finely crystalline to microcrystalline, dolomitic, fair vugular porosity, no show, pyritic with well-developed crystalline cubes.
2385	2400	Limestone - as above, but great increase in pink coloring and slight coarser crystallinity, dolomitic. Trace chert, pyritic. Chert shows some sand content.
2400	2425	Limestone - white, pink, fine to microcrystalline, dolomitic, fair vugular porosity, increasingly pyritic in finely disseminated crystals and in coarsely disseminated crystals slightly glauconitic. Small stringers green fine-grained sand at base with greatest concentration of pyrite.
2425	2430	Sandstone - white, light-gray, greenish, fine-grained, limy, grains are sub-rounded to angular, well-sorted, porosity visible under 54 magnification, slightly pyritic in massive pieces, trace glauconite. Drilled slow.
2430	2464	Sandstone - white, light-gray, greenish, pink-stained, fine-grained, limy; grains are sub-rounded to angular, and well-sorted, no visible porosity, pyritic, cherty, trace of glauconite. Chert is white and light gray, mottled, opaque.
		Strapped pipe correction 2464 equals 2438.
2438	2450	Sandstone - white, light-gray, green, pinkish-mottled and fine-grained, grains are sub-rounded to angular and fairly well-sorted, no visible porosity, pyritic, cherty, some discolored grains. Some fine stringers of white and pink, fine-grained limestone. Chert is light gray, opaque to sub-opaque.
2450	2455	Limestone - white, pinkish-white, fine to medium crystalline, dolomitic, slight to fair vugular porosity, cherty, chert is white and mottled, opaque. Layered with sandstone as above.
2455	2475	Sandstone - buff, fine-grained, no visible porosity; grains are sub-rounded to angular and well-sorted, pyritic, cherty. Chert is white, light-gray, opaque. Some sandstone has fine crystals of limestone embedded. Layered with limestone - buff, finely crystalline, pyritic.
2475	2485	Limestone - white and buff, fine to microcrystalline, dolomitic no visible porosity, cherty. Chert is white, opaque, hard, layered with sandstone as above.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
2485	2495	Sandstone - buff, fine-grained, no visible porosity. limy; grains are sub-angular, well-sorted, quartzose and cherty. Layered with some white and buff, finely crystalline limestone.
2495	2545	Sandstone - Ditto above with increase in limestone content and decrease in sandstone - limestone predominant. Limestone is white and buff, sandy, dense to microcrystalline, with much soft chalky lime present. No indicated porosity, cherty. Samples very poor.
2545	2555	Limestone - white, pink, greenish-white, fine to microcrystalline, sandy, dolomitic, no indicated porosity. Many coarse well-rounded sand grains embedded.
2555	2560	Limestone - buff, reddish and greenish-white, fine to microcrystalline, dolomitic, trace of vugular porosity. No show. Samples good. Drilled about 8 minutes per foot.
2560	2570	Limestone - white, buff, pink, rose-pink, light gray, yellow, microcrystalline to medium crystalline, slight vugular porosity, dolomitic, slightly pyritic, slightly sandy with large well-rounded grains, no show, pink coloring predominant.
2570	2575	Limestone - as above, but less pink coloring, and much greenish white and white. Trace white opaque chert.
2575	2585	Limestone - white, pink, buff, microcrystalline to medium crystalline, dolomitic, slightly pyritic, trace chert. Some layers of white and discolored, fine-grained sandstone. Sandstone has poorly-sorted, sub-rounded to sub-angular grains; some internally discolored grains, limy. No indicated porosity.
2585	2590	Limestone - white, pink, buff, microcrystalline, dolomitic, slightly cherty, slight vugular porosity. No show.
2590	2605	Limestone - Largely buff, some pink, greenish-white, yellowish-buff and white coloring, dense to microcrystalline, dolomitic, trace of fine-grained sand embedded, trace of vugular porosity, no shows.
2605	2610	Limestone - as above, with increase in pink and yellowish buff coloring.
2610	2620	Limestone - largely pink and red, dense to micro-crystalline, dolomitic, slight vugular porosity.
2620	2650	Sandstone - white, buff, pink, fine-grained, limy; grains are sub-angular to rounded and fairly well-sorted with few large floater grains; no indicated porosity, slightly pyritic. No shows. Drilled fast. Lost circulation at 2645.
2650	2665	Limestone - buff, pink, white, rose-pink, microcrystalline, dolomitic, slight vugular porosity. No shows, trace of pyrite with very minute pieces of glauconite, poorly distributed, traces of white, pulverent chalk.
2665	2670	Limestone - buff, white, dense, calcite, cherty, little or no indicated porosity. Chert is buff, sub-translucent, and quite abundant.
2670	2680	Limestone - white, buff, dense to microcrystalline. No indicated porosity, slightly cherty, calcitic. Chert is white and buff, sub-opaque, less abundant than above.

	<u>TO</u>	<u>DESCRIPTION</u>
2680	2690	Limestone - white, microcrystalline. No indicated porosity, no shows, calcitic. Trace of buff, sub-opaque to sub-translucent chert. Calcite is largely clear, becoming quite at 2685.
2690	2720	Limestone - buff, white, tan, rose-pink, dense to microcrystalline, dolomitic, trace of vugular porosity, no show.
2720	2730	Limestone - buff, white, tan, pink and rose-pink, dense to microcrystalline, dolomitic, trace of vugular porosity. No show.
2730	2740	Limestone - white, buff, tan, light gray, pink, dense to microcrystalline, dolomitic, trace of vugular porosity. No show.
2740	2745	Limestone - as above, but largely tan in color.
2745	2760	Limestone - buff, tan, pink, rose-pink, dense to microcrystalline, dolomitic, no indicated porosity or show.
2760	2775	Limestone - tan, dense to microcrystalline, dolomitic, hard, no indicated porosity or show.
2775	2805	Limestone - tan, dense to microcrystalline hard, very slight vugular porosity, no show.
2805	2815	Limestone - buff and tan, dense to microcrystalline, dolomitic, hard, slight trace of vugular porosity, no show. Trace of white opaque chert.
2815	2825	Limestone - buff and tan, trace of white, dense to microcrystalline, dolomitic, hard, trace of vugular porosity, trace of white opaque to sub-opaque chert.
2825	2835	Limestone - largely buff, some tan, largely dense, some microcrystalline, dolomitic, fair vugular porosity, trace of white sub-opaque chert.
2835	2845	Limestone - largely buff, some tan, dense to microcrystalline dolomitic, slight vugular porosity, trace of white and buff sub-opaque chert. Some with black spots.
2845	2855	Limestone - tan and buff, dense to microcrystalline, dolomitic slight to fair vugular porosity, no show.
2855	2870	Limestone - largely buff, some tan, microcrystalline, dolomite slight to fair vugular porosity.
2870	2880	Limestone - as above with some gray discoloration.
2880	2895	Limestone - buff to tan, microcrystalline, dolomitic, slight to fair vugular porosity. Trace of buff and white sub-opaque chert.
2895	2915	Limestone - buff to tan, dense to microcrystalline, dolomitic, fair vugular porosity, no show.
2915	2940	Limestone - as above with increase in tan coloring, largely microcrystalline.
2940	2960	Limestone - buff to tan, dense to microcrystalline, slight to fair vugular porosity, dolomitic, red staining.
2960	2965	Limestone - buff to tan, dense to microcrystalline, dolomitic fair to good vugular porosity with increased red and yellow coloring - especially on vugular surfaces.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
2965	2980	Limestone - buff to tan, largely microcrystalline, some dense, dolomitic, slight to fair vugular porosity, no red and yellow coloring.
2980	2985	Limestone - buff, dense to microcrystalline, dolomitic, slight vugular porosity, trace of clear coarsely crystalline calcite, trace of white chalky limestone.
2985	3005	Limestone - buff to tan, largely microcrystalline, dolomitic, some dense, trace of vugular porosity, trace of rust-stain.
3005	3010	Limestone - buff and tan, some white and chalky, dense to microcrystalline, dolomitic, trace of vugular porosity, cherty, chert is buff and sub-opaque, some white and opaque - some having appearance of replacement of limestone.
3010	3050	Limestone - buff and tan, dense and microcrystalline, dolomitic, trace of vugular porosity, increase in white chalky limestone.
3050	3075	Limestone - largely buff, dense, trace of microcrystalline, dolomitic, further increase in white, soft, chalky limestone.
3075	3120	Limestone - largely buff to tan, dense to microcrystalline, dolomitic trace of fine crystallinity in vugs, trace of vugular porosity.
3120	3140	Limestone - buff to light tan, dense to microcrystalline, dolomitic, slight vugular porosity, increase in vugularity from above.
3140	3165	Limestone - buff to tan, dense to microcrystalline, dolomitic, trace of vugular porosity.
3165	3195	Limestone - buff to light tan, dense to microcrystalline, dolomitic, slight increase in vugularity, Substantial increase in white, chalky, limestone in irregular layers.
3195	3205	Limestone - buff to tan, dense to microcrystalline, dolomitic, trace of vugular porosity, with irregular layers of white chalky limestone. Chalky limestone composes about 20% mass.
3205	3245	Limestone - largely tan, dense to microcrystalline, dolomitic, trace of vugular porosity with decrease in white chalky limestone. Trace of black carbonaceous residue on several pieces.
3245	3285	Limestone - buff to tan, dense to microcrystalline, dolomitic, trace of vugular porosity, increase in white chalky limestone from above at top, also at 3275. Some traces of white and clear, coarsely crystalline calcite.
3285	3200	Limestone - buff to tan, dense to microcrystalline, dolomitic, slight increase in vugular porosity. Trace of white chalk trace of whitish, buff, fine sucresic-textured limestone; little pink discoloring. Increase in white chalk at 3290; at 3295 it becomes 30% of mass.
3200	3205	Limestone - white, chalky, soft, predominant with intermixture of buff to tan, dense to microcrystalline, dolomitic, limestone as above. Also some buff, fine, sucresic limestone and trace of chert.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
3305	3316	Limestone - tan, microcrystalline, dolomitic with much buff, tan, white and mottled opaque chert. Chert 50% of mass, and showing slight trace of carbonaceous material on fracture.
		<i>msi (Teasdale)</i>
3316	3320	Chert - buff, black, brown, mottled, opaque; black-brown microcrystalline, hard limestone; trace of tan, microcrystalline. Fractures are heavily impregnated with black, carbonaceous material. Possibly very minute trace of black, viscose oil in few fractures.
3320	3330	Chert - buff, brown, black, mottled, opaque, some resinous; some limestone - black and dark brown, microcrystalline, dolomitic resinous, tight. Carbonaceous shale in some fractures.
<u>CORED</u>		Core #8 3330 - 3345 Recovered 4 $\frac{1}{2}$ /15
3330	3334 $\frac{1}{2}$	Limestone - buff, microcrystalline, dolomitic, hard, slight vugular porosity, few irregular pieces of carbonaceous material in small spherical blobs.
3334 $\frac{1}{2}$	3345	Dolomite - no recovery in this section. Finely crystalline, fair vugular porosity. No show.
<u>DRILLED</u>		
3345	3365	Dolomite - buff to tan, fine to microcrystalline, increase in vugularity. No shows, few pieces of white calcite, and some stringers of white, microcrystalline, dolomitic limestone with good vugular porosity.
3365	3375	Dolomite - as above with slight increase in white limestone.
3375	3405	Dolomite - buff to tan, dense to finely crystalline, calcite, fair vugular porosity.
3405	3430	Limestone - buff, dense no porosity discernible, with stringers of white chalk.
3430	3435	Limestone - buff, dense as above with possible stringers of tan, microcrystalline, dolomitic limestone.
3435	3445	Limestone - buff, dense with no discernible porosity, few small nodules present.
3445	3485	Limestone - white to tan, dense, hard, slightly calcitic, trace of chalk - white, soft, in stringers.
3485	3500	Limestone - principally tan, trace whitish-buff, dense, hard, trace of semi-nodular, trace of white chalk, some very minute traces of glauconite and green coloring.
3500	3515	Limestone - tan with some lighter coloring on fractured edges, hard, dense, Trace of light-tan, microcrystalline, dolomitic and some white chalk.
3515	3525	Limestone - tan to gray-tan, dense, hard, trace of chalk.
3525	3556	Limestone - buff to tan to grayish-tan, dense, hard, trace of white, chalky, limestone.
Total Depth 3556'		January 5, 1949. Temporarily shut down for winter.

Drilling operations resumed April 24, 1949.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
3556	3565	Limestone - buff to tan to grayish tan to dark gray, in part dolomitic (white), dense, hard; with some white chalky limestone; few thin stringers of white, fine-grained sandstone, non-calcic, with traces of glauconite and ferrous iron.
3565	3570	Limestone - grayish tan to dark gray with diminishing amounts of buff to tan limestone, in part dolomitic; with traces of white chalky limestone.
3570	3580	Limestone - grayish tan to dark gray; with interbedded buff to tan vugular dolomite. some green staining along fracture surfaces of dolomite, a few thin stringers of white, fine-grained sandstone with microscopic crystallines of pyrite.
3580	3590	Limestone - as above with disappearance of vugular dolomite; slight increase of white, chalky limestone.
3590	3595	Limestone - grayish tan to dark gray with a trace of buff to tan vugular dolomite; trace of white, chalky, limestone.
3595	3605	Limestone - grayish tan to dark gray; white, chalky, limestone 50% of total sample; trace of buff to tan vugular dolomite.
3605	3680	Limestone - as above with traces of carbonaceous residue along some fracture surfaces and in a few vugs; trace of white, chalky, limestone from 3645 to 3650 Brachiopod shell impressions.
3680	3705	Limestone - as above with white, chalky, limestone 50% of total sample. From 3695 - 3700, Brachiopod shell impressions.
3705	3715	Limestone - dark gray to grayish tan, dense, hard, in part dolomitic; with traces of black carbonaceous shale and trace of carbonaceous residue along some fractures; the dark gray lime is in excess of 50% of total sample; trace of white, chalky, limestone.
3715	3725	Limestone - as above with slight increase of black carbonaceous shale. Black shale makes up 10 to 15% of sample total.
3725	3730	Limestone - as above with 10% blue-green shale, in part limey; with increase in white, chalky limestone.
3730	3745	Limestone - as above with trace of blue-green shale and trace of blue-green staining in the carbon residue of some of the fractures. There is a slight decrease of black carbonaceous shale with an increase of grayish tan limestone.
3745	3850	Limestone - dark gray to grayish tan, hard, dense in part dolomitic with a slight increase of blue-green shale. There is some evidence of fracture filling with crystalline anhydrite; trace of black carbonaceous shale and white chalky limestone.

Previous samples examined by:

*Otis B. Fenner*  
 Otis B. Fenner

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
3850	3860	Limestone & Bentonitic shale - buff brown to light gray dolomitic limestone, and light olive green bentonitic shale. Limestone is crystalline in part, micro-crystalline throughout, hard, dense, massive, some small fractures notes with calcite fillings. Numerous black, limey, carbonaceous fragments. Shale is medium soft, massive, punky. Drilled 28 mins./ft.
3860	3870	Limestone & Bentonitic shale - gray to light gray, hard, dense to micro-crystalline limestone and olive green, punky, limey, bentonitic shale. Limestone shows few minute fractures with calcite fillings. Few free fragments of crystalline calcite and dolomitic limestone. Drilled 29 mins./ft.
3870	3880	Limestone - as above. Limey shale content probably 5%. Limestone is predominantly dark brownish gray, crystalline, trace of white chalky material on fresh surfaces. Sample shows marked increase in crystallinity. Few free fragments of dolomitic limestone. Drilled 26 mins./ft.
3880	3885	Limestone - as above with few fragments of punky, green, bentonitic shale. Limestone is generally crystalline with rare iron-oxide staining. No apparent porosity. Small amount of very dense, massive, buff-brown limestone. Drilled 22 mins./ft.
3885	3890	Limestone - as before. Cuttings very fine due to slow drilling rate. Crystalline with few massive fragments. Abundance of free quartz grits, rounded to sub-angular. Rare black, limey, carbonaceous fragments. Drilled 48 min./ft.
3890	3895	Limestone - as before. Very dense to micro-crystalline in part, finely micaceous. Few fragments of green bentonitic shale as before. Scattered fragments of rust colored siltstone, hard, well sorted, very tight. Drilled 120 mins./ft.
3895	3900	Limestone - as before. Crystalline in part, micro-crystalline throughout, commonly micaceous, sugary texture in part, very tightly cemented, hard, rare iron-oxide staining. Few fragments of rust colored siltstone as before. Drilled 52 mins./ft.
3900	3905	Limestone - light to dark gray, crystalline to micro-crystalline dolomitic in part, hard, some rare local pyritization, rare black, limey carbonaceous fragments, some iron-oxide staining, small amount of chalky white, soft, limey fragments. Scattered rust colored siltstone as before. Drilled 36 mins./ft.
3905	3910	Limestone - light brown to dark gray, crystalline, common quartz grits, some rust colored and whitish-gray siltstone, rare carbonaceous limey fragments. Cuttings are very fine and gritty. Drilled 46 mins./ft.
3910	3915	Limestone - gray to grayish-white to buff, crystalline, dolomitic with rare fragments of milky white dolomite showing fair to poor vugular porosity. Slight increase in rust-red, limey, siltstone. Sparse iron-oxide staining. Drilled 32 mins./ft.
3915	3920	Limestone - grayish white to buff brown, crystalline with few very hard and dense fragments, rare free dolomite. Drilled 25 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
3920	3930	Limestone - as above, few fragments have mottled dark and light gray to black coloring, crystalline in general, rare fragments of green, punky, limoy, bentonitic shale. Drilled 35 mins./ft.
3930	3935	Limestone - as above, predominantly light brown in color, generally micro-crystalline. Drilled 35 mins./ft.
3935	3940	Limestone - as above, light brown to gray-white, increase in dense, massive, whitish-gray fragments. No free dolomite. Some rare iron-oxide staining. Drilled 33 mins./ft.
3940	3945	Limestone - as before, with few fragments showing porphyritic texture with sub-rounded, dark gray quartz grits embedded in light gray, limy groundmass. In general the crystallinity is decreasing and cuttings are dense with vitreous luster. Drilled 49 mins./ft.
3945	3950	Limestone - as before, light tan to whitish gray, dense, vitreous luster, cuttings are very fine. Drilled 53 mins./ft.
3950	3960	Limestone - as before, generally buff tan in color, few fragments show minute fractures with calcite fillings, rare local iron-oxide staining, few fragments of green glauconite and black carbonaceous material. Drilled 54 mins./ft.
3960	3965	Limestone - as before, generally buff brown to light tan and gray, micro-crystalline. some pyritization with rare iron-oxide staining, few greenish, glauconitic fragments, commonly micaceous. Drilled 55 mins./ft.
3965	3970	Limestone - commonly light tan to gray-white, micro-crystalline to dense with few fragments showing very evenly sorted, sugary texture, common iron-oxide staining. Drilled 65 mins./ft.
3970	3975	Limestone - tan to gray-white, rare iron-oxide staining, abundance of free quartz grits, rounded to sub-angular, few green colored conglomeratic appearing fragments. Drilled 20 mins./ft.
3975	3980	Limestone - tan to grayish white, generally micro-crystalline with rare dense, creamy gray fragments, common iron-oxide staining. Drilled 23 mins./ft.
3980	3990	Limestone - largely light vitreous brown with several fragments showing a dark brown discoloration, crystalline to micro-crystalline with rare, dense massive fragments, very finely micaceous. Drilled 43 mins./ft.
3990	4000	Limestone - light tan to brown to dark gray, micro-crystalline to dense, finely micaceous, some pale green, crystalline fragments and rare rose pink, vitreous fragments, very rare iron-oxide staining. Drilled 16 mins./ft.
4000	4005	Limestone - generally light tan to brown to grayish-white, very finely crystalline giving a sandy coating to individual fragment and a sandy lime appearance to the sample, finely micaceous with some rare pyritization. Drilled 26 mins./ft.
4005	4010	Limestone - as before, some dense, hard, fragments, some sandy appearance, rare iron-oxide staining. Drilled 38 mins./ft.
4010	4015	Limestone - as before, predominantly dark brown and gray, some chalky white limy material on edges, some very dense, hard fragments. In general, very uniformly micro-crystalline. Drilled 33 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4015	4025	Limestone - as before, dark to light gray and dark to light brown, very finely crystalline in part, in general is very hard, dense, massive, rare fragments of dolomite showing very poor vugular porosity, finely micaceous in the darker brown fragments. Drilled 35 mins./ft.
4025	4030	Limestone - as before, predominantly light tan and light to dark gray, dense to micro-crystalline with rare sandy fragments having dark brown discoloration, few buff colored nodular fragments, soft, friable. Drilled 26 mins./ft.
4030	4035	Limestone - as before, cuttings are very fine with common angular to sub-angular quartz grits. Sample in general is dense to micro-crystalline. Drilled 26 mins./ft.
4035	4045	Limestone - as before, generally light gray to steel blue, dense with few crystalline fragments, thin coating of black, limey, carbonaceous material on edges of some fragments. Drilled 37 mins./ft.
4045	4050	Limestone - as before, some buff colored and rose quartz colored fragments, micro-crystalline, hard, some black, limey, carbonaceous, massive fragments, finely micaceous. Drilled 37 mins./ft.
4050	4055	Limestone - as before, generally light gray, some chalky white fragments, dense to micro-crystalline. Drilled 36 mins./ft.
4055	4060	Limestone - as before, common light gray, dense fragments, few buff colored nodular fragments, thin black carbonaceous coating on some fragments. Drilled 36 mins./ft.
4060	4065	Limestone - as before, generally micro-crystalline, finely micaceous, some local pyritization. Drilled 36 mins./ft.
4065	4070	Limestone - as before, dominantly light gray in color, dense to micro-crystalline. Drilled 40 mins./ft.
4070	4075	Limestone - as before, generally light tan to whitish-gray, crystalline to micro-crystalline, very finely micaceous, some buff to rust colored nodular fragments. Drilled 24 mins./ft.
4075	4080	Limestone - as before, generally light gray to light tan, some chalky white fragments, crystalline to micro-crystalline, very brittle. Drilled 30 mins./ft.
4080	4085	Limestone - as before, generally light gray in color with some dark brown crystalline fragments, some mottled black and gray fragments, some creamy white dolomite showing no vugular porosity. Drilled 24 mins./ft.
4085	4090	Limestone - as before, generally light to dark gray, micro-crystalline to massive, common chalky white material on edges. Drilled 30 mins./ft.
4090	4095	Limestone - as before, crystalline to micro-crystalline, finely micaceous, Drilled 14 mins./ft.
4095	4100	Limestone - as before, noticeable increase in light tan to brown coloring, dense to crystalline, finely micaceous, some chalky white material noted on edges. Drilled 20 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4100	4105	Limestone - as before, gray to dark brown, crystalline, micaceous, rare fragments of dark gray, dense limestone, in general has a very even, sugary texture, tight, no apparent porosity. Drilled 22 mins./ft.
4105	4110	Limestone - as before, very evenly crystalline, few fragments are mottled black and dark gray, rare fragments of white dolomite showing very poor vugular porosity, some chalky white material on edges of limestone fragments. Drilled 22 mins./ft.
4110	4115	Limestone - as before, few fragments are opaque with sub-vitreous luster, generally light gray to brown in color. Drilled 20 mins./ft.
4115	4120	Limestone - as before, predominantly a stain colored brown, crystalline, sugary texture, rare fractures with calcite fillings. Drilled 20 mins./ft.
4120	4125	Limestone - as last above. Drilled 21 mins./ft.
4125	4130	Limestone - as before, generally tan to light gray, crystalline to micro-crystalline, slight decrease in mica content, rare crystals of green glauconite, and green glauconitic coloring. Drilled 21 mins./ft.
4130	4135	Limestone - as before, tan to gray, micro-crystalline in general with some dense fragments, brittle, rare carbonaceous coating on some fragments, slightly dolomitic in part. Drilled 19 mins./ft.
4135	4140	Limestone - as before, generally a mottled light tan and gray in color, crystalline to micro-crystalline, common chalky white material appearing on edges of fragments. Drilled 25 mins./ft.
4140	4145	Limestone - as last above. Drilled 23 mins./ft.
4145	4150	Limestone - as before, generally gray to gray-brown in color with abundance of vitreous white quartz giving a mottled appearance, even-textured, brittle. Drilled 21 mins./ft.
4150	4155	Limestone - as before, predominantly light to dark gray in color, dense to micro-crystalline, some rare iron-oxide staining, brittle. Drilled 23 mins./ft.
4155	4160	Limestone - as before, brown to gray with rare fragments of pale buff-brown very dense dolomite, generally micro-crystalline to crystalline. Drilled 18 mins./ft.
4160	4165	Limestone - as before, generally gray to mottled white and gray, rare small black crystals occur as irregular inclusions, some local iron-oxide staining, appears tight. Drilled 13 mins./ft.
4165	4170	Limestone - as before, generally light gray in color, micro-crystalline, slight increase in amount of iron-oxide staining, brittle. Drilled 14 mins./ft.
4170	4175	Limestone - as before, dense to micro-crystalline, some free calcite crystals noted. Drilled 14 mins./ft.
4175	4180	Limestone - as before, generally gray to mottled gray-black and white, dense to micro-crystalline, some buff-tan very dense dolomite, brittle. Drilled 15 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4180	4190	Limestone - as before, generally gray to gray-white, micro-crystalline, some white dolomite, dense, no apparent porosity. Drilled 19 mins./ft.
4190	4195	Limestone - as before, slight increase in amount of dolomite, no apparent porosity. Drilled 26 mins./ft.
4195	4200	Limestone - as before, predominantly light gray and white in color, crystalline to dense, the more crystalline fragments showing an even sugary texture, rare calcite crystals on some fragments, tight, brittle. Drilled 22 mins./ft.
4200	4205	Limestone - as before, light gray to buff-brown, some mottled gray and black finely crystalline, finely micaceous, some rare olive green coloration, brittle. Drilled 22 mins./ft.
4205	4210	Limestone - as before, predominantly white to light gray, finely crystalline to dense, very tight, brittle. Drilled 26 mins./ft.
4210	4215	Limestone - as before, some rare white dolomite fragments showing fair to good vugular porosity, crystalline, micaceous. Drilled 25 mins./ft.
4215	4220	Limestone - as before, grading to a darker shade of gray, finely crystalline, some rare black carbonaceous fragments. Drilled 27 mins./ft.
4220	4230	Limestone - as before, micro-crystalline to dense, rare local iron-oxide staining. Drilled 24 mins./ft.
4230	4235	Limestone - as before, slightly darker gray in color, generally quite dense, some free calcite crystals. Drilled 24 mins./ft.
4235	4240	Limestone - as before, generally light tan to light gray, crystalline in lighter shades. Drilled 22 mins./ft.
4240	4245	Limestone - as before, whitish-gray to tan, crystalline to dense, vitreous to sub-vitreous luster, very tight, brittle. Drilled 20 mins./ft.
4245	4250	Limestone - as before, generally dense, very uniform. Drilled 20 mins./ft.
4250	4255	Limestone - as before, generally gray in color, very finely micaceous. Drilled 25 mins./ft.
4255	4260	Limestone - as last above. Drilled 27 mins./ft.
4260	4265	Limestone - as last above. Drilled 23 mins./ft.
4265	4270	Limestone - as before, gray to dark gray to brown, very dense, hard, brittle. Drilled 35 mins./ft.
4270	4275	Limestone - as before, generally light gray, dense to finely crystalline. Drilled 35 mins./ft.
4275	4280	Limestone - as before, finely crystalline, few black carbonaceous fragments. Drilled 39 mins./ft.
4280	4285	Limestone - as before, generally light to dark gray with some green glauconitic coloration, few fragments speckled with very fine grains of green glauconite, rare iron-oxide staining. Drilled 25 mins./ft.
4285	4290	Limestone - as before, generally gray to brown, rare glauconitic coloring, dense to finely crystalline, micaceous, some chalky white material. Drilled 25 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4290	4295	Limestone - as last above. Drilled 20 mins./ft.
4295	4300	Limestone - as before, generally gray in color, finely crystalline to dense, very rare iron-Oxide staining. Drilled 17 mins./ft.
4300	4305	Limestone - as before, gray to whitish-gray, micro-crystalline, sub-vitreous rare chalky white fragments, rare iron-oxide staining. Drilled 15 mins./ft.
4305	4310	Limestone - as before, gray to brown, crystalline, some chalky white fragments showing sugary texture. micaceous, brittle. Drilled 18 mins./ft.
4310	4315	Limestone - as before, generally gray in color, dense to crystalline, some chalky white fragments. Drilled 17 mins./ft.
4315	4320	Limestone - as above, some rare black, limey, carbonaceous fragments. Drilled 21 mins./ft.
4320	4325	Limestone - as before, whitish-gray to gray, dense to micro-crystalline, few fragments speckled with blackish-green glauconite, rare carbonaceous fragments. Drilled 22 mins./ft.
4325	4330	Limestone - as before, grayish-white to brown, dense to crystalline, micaceous, speckles of glauconite as before. Drilled 22 mins./ft.
4330	4335	Limestone - as last above, generally dense. Drilled 22 mins./ft.
4335	4340	Limestone - as last above. Drilled 32 mins./ft.
4340	4350	Limestone - as last above, crystalline to micro-crystalline. Drilled 31 mins./ft.
4350	4355	Limestone - as before, generally gray in color, generally dense, some rare pyritization. Drilled 39 mins./ft.
4355	4360	Limestone - as before, dark gray in color, micro-crystalline, few fragments of soft, punky, green, bentonitic shale. Drilled 39 mins./ft.
4360	4365	Limestone - as before, generally gray, dense to micro-crystalline some white chalky fragments. Drilled 70 mins./ft.
4365	4370	Limestone - as before, generally gray, dense to very finely crystalline. Drilled 46 mins./ft.
4370	4375	Limestone - as before, gray to brown, dense, massive. Drilled 24 mins./ft.
4375	4385	Limestone - as before, gray to brown, dense to micro-crystalline, some free sub-angular quartz grits, calcite inclusions on some fragments. Drilled 25 mins./ft.
4385	4390	Limestone - as last above, some chalky white fragments. Drilled 24 mins./ft.
4390	4395	Limestone - as before, generally gray in color, dense to crystalline, rare canary yellow staining, rare iron-oxide staining. Drilled 21 mins./ft.
4395	4400	Limestone - as before, gray to brown in color, some chalky white fragments. Drilled 23 mins./ft.
4400	4405	Limestone - as before, generally gray to brown, dense to micro-crystalline, rare pyritization, some chalky white fragments, massive, brittle. Drilled 26 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4405	4410	Limestone - as before, generally gray, dense to crystalline, few fragments of green bentonitic shale as before, very rare iron-oxide staining. Drilled 27 mins./ft.
4410	4415	Limestone - as before, generally light gray, dense, brittle. Drilled 26 mins./ft.
4415	4420	Limestone - as before, light gray to buff-brown, dense to micro-crystalline, very finely micaceous. Drilled 31 mins./ft.
4420	4425	Limestone - as before, slight increase noted in gray coloring. Drilled 30 mins./ft.
4425	4430	Limestone - as before, gray to buff-brown, very finely crystalline common black carbonaceous fragments and thin gray-black coatings of carbonaceous material on some limestone fragments. Drilled 34 mins./ft.
4430	4435	Limestone - as before, generally buff-brown to brown, dense to micro-crystalline, rare chalky white fragments and coating of chalky white material on limestone fragments. Drilled 42 mins. per foot.
4435	4440	Limestone - as last above, buff-brown to gray. Drilled 28 mins./ft.
4440	4445	Limestone - as before, generally buff-brown, generally dense, some fragments of dark brown limestone have very fine grained sandy texture, very uniform sorting, sandy content appears as a coating on the dense fragments. Drilled 22 mins./ft.
4445	4450	Limestone - as before, generally buff-brown with occasional dark brown sandy fragments as last above, rare chalky white material. Drilled 27 mins./ft.
4450	4455	Limestone - as before, generally buff-brown with dark gray fragments, dense, rare calcite crystals as inclusions on edges of limestone fragments, rare iron-oxide staining. Drilled 25 mins./ft.
4455	4460	Limestone - as before, generally buff-brown, dense to very finely crystalline, common chalky white material occurring as thin coatings on edges of limestone fragments, and as irregular inclusions within the limestone, rare carbonaceous fragments. Drilled 31 mins./ft.
4460	4465	Limestone - as before, generally buff-brown, with occasional dark gray fragments, dense to micro-crystalline, rare iron-oxide staining. Drilled 16 mins./ft.
4465	4470	Limestone - as before, generally buff-brown to gray, dense, sub-vitreous luster, occasional free white chalky fragments. Drilled 14 mins./ft.
4470	4475	Limestone - as before, white to buff-brown to gray, generally dense to micro-crystalline, some green glauconite specks, some free calcite crystals on edges of limestone fragments, some free chalky white material. Drilled 18 mins./ft.
4475	4480	Limestone - as last above, rare iron-oxide staining. Drilled 23 mins./ft.
4480	4485	Limestone - as before, darker brown in color, dense to finely crystalline. Drilled 24 mins./ft.
4485	4490	Limestone - as before, buff-brown to brown, finely crystalline, some chalky white fragments, some carbonaceous coatings on limestone fragments. Drilled 22 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4490	4495	Limestone - as before, buff-brown to gray, finely crystalline, some free calcite crystals, some carbonaceous fragments and coatings, some local iron-oxide staining. Drilled 24 mins./ft.
4495	4500	Limestone - as last above, generally buff-brown in color. Drilled 26 mins./ft.
4500	4505	Limestone - as above, buff-brown to brown, no iron-oxide staining. Drilled 26 mins./ft.
4505	4510	Limestone - as before, generally brown in color, dense to micro-crystalline. Drilled 27 mins./ft.
4510	4520	Limestone - as before, commonly brown to brown-gray in color, generally dense, common iron-oxide staining, rare carbonaceous coatings. Drilled 19 mins./ft.
4520	4525	Limestone - as before, generally grayish brown, dense to very finely crystalline, some local pyritization, common iron-oxide staining, some carbonaceous and chalky white fragments. Drilled 22 mins./ft.
4525	4530	Limestone - as before, commonly brown in color, dense to finely crystalline, common chalky white coatings, rare iron-oxide staining. Drilled 26 mins./ft.
4530	4535	Limestone - as last above, common carbonaceous coatings. Drilled 28 mins./ft.
4535	4540	Limestone - as before, generally brown to gray-brown in color, very rare iron-oxide staining, common carbonaceous coatings, chalky white fragments. Drilled 26 mins./ft.
4540	4545	Limestone - as before, gray-brown in color, dense, rare iron-oxide staining, few fragments of soft, white gypsum. Drilled 37 mins./ft.
4545	4550	Limestone - as last above, no free gypsum noted. Drilled 33 mins./ft.
4550	4555	Limestone - as above, common carbonaceous coatings. Drilled 26 mins./ft.
4555	4560	Limestone - as before, rare carbonaceous coatings, rare iron-oxide staining, few fragments of free gypsum. Drilled 24 mins./ft.
4560	4565	Limestone - as before, white to whitish-gray to buff-brown, dense, few fragments of free gypsum, common carbonaceous coatings. Drilled 25 mins./ft.
4565	4570	Limestone - as last above. Drilled 30 mins./ft.
4570	4575	Limestone - as before, light gray with common white, dense, dolomite. Limestone is dense, massive, with fine grained sandy coating, some free chalky white fragments and some chalky white coatings. Drilled 35 mins./ft.
4575	4580	Limestone - as before, generally gray to gray-brown, dense to very finely crystalline, common carbonaceous coatings, rare free dolomite fragments, some iron-oxide staining. Drilled 22 mins./ft.
4580	4585	Limestone - as last above, generally dense, few free fragments of white dolomite showing fair to good vugular porosity, some chalky white coatings. Drilled 22 mins./ft.
4585	4590	Limestone - as before, white to whitish-gray to gray-brown, very finely crystalline, no free dolomite, rare chalky white coatings. Drilled 20 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4590	4595	Limestone - as last above. Drilled 21 mins./ft.
4595	4600	Limestone - as above, generally gray-brown in color. Drilled 12 mins./ft.
4600	4605	Limestone - as before, generally brown to gray-brown with few white fragments, dense to micro-crystalline, sub-vitreous luster, slightly micaceous, rare black carbonaceous fragments. Drilled 14 mins./ft.
4605	4610	Limestone - as last above. Drilled 15 mins./ft.
4610	4615	Limestone - as above, few white chalky fragments, few fragments of free calcite. Drilled 16 mins./ft.
4615	4620	Limestone - as before, generally brown to buff-brown in color, few fragments of white, crystalline dolomite showing fair to poor vugular porosity, few pieces of white soft, gypsum occurring as inclusions within the limestone fragments. Drilled 18 mins./ft.
4620	4625	Limestone - as before, generally gray-brown in color, dense, rare iron-oxide staining. Drilled 18 mins./ft.
4625	4630	Limestone - as before, generally brown, micro-crystalline to crystalline, commonly micaceous. Drilled 22 mins./ft.
4630	4635	Limestone - as before, rare fragments of white dolomite showing fair to poor vugular porosity as before. Drilled 18 mins./ft.
4635	4640	Limestone - as before, generally gray-brown in color, dense to micro-crystalline. Drilled 16 mins./ft.
4640	4645	Limestone - as last above. Drilled 24 mins./ft.
4645	4650	Limestone - as above, dense to finely crystalline. Drilled 25 mins./ft.
4650	4655	Limestone - as before, generally dense to micro-crystalline, very fine grained sandy texture, common black carbonaceous inclusions. Drilled 28 mins./ft.
4655	4660	Limestone - as above. Drilled 27 mins./ft.
4660	4665	Limestone - as before, gray to brown, generally dense, local iron-oxide staining, rare fragments of white dolomite showing no vugular porosity. Drilled 20 mins./ft.
4665	4670	Limestone - as before, gray to brown, crystalline to micro-crystalline, rare green glauconite coloring, some calcite crystals occurring as inclusions. slight increase in iron-oxide staining. Drilled 17 mins./ft.
4670	4675	Limestone - as last above, common carbonaceous fragments and inclusions, rare pyritization noted. Drilled 18 mins./ft.
4675	4680	Limestone - as before, very rare iron-oxide staining and carbonaceous fragments, finely micaceous, dense to micro-crystalline. Drilled 22 mins./ft.
4680	4685	Limestone - as before, gray-brown to gray-white, generally crystalline, slight increase in carbonaceous material. Drilled 22 mins./ft.
4685	4690	Limestone - as last above, increase in grayish-white coloring, generally micro-crystalline. Drilled 24 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4690	4695	Limestone - as last above. Drilled 21 mins./ft.
4695	4700	Limestone - as above, generally dense to micro-crystalline. Drilled 23 mins./ft.
4700	4705	Limestone - as above. Drilled 23 mins./ft.
4705	4710	Limestone - as above, generally micro-crystalline to crystalline. Drilled 18 mins./ft.
4710	4715	Limestone - as above. Drilled 21 mins./ft.
4715	4720	Limestone - as before, few fragments of white dolomite showing fair vugular porosity, rare carbonaceous material occurings as fine coatings on the limestone fragments. Drilled 20 mins./ft.
4720	4725	Limestone- as last above, no dolomite noted. Drilled 23 mins./ft
4725	4730	Limestone - as before, dense to finely crystalline, rare chalky white material. Drilled 22 mins./ft.
4730	4735	Limestone - as before, generally light gray in color. Drilled 23 mins./ft.
4735	4740	Limestone - as above, generally gray-brown in color, dense. Drilled 24 mins./ft.
4740	4745	Limestone - as last above, dense to finely crystalline. Drilled 24 mins./ft.
4745	4750	Limestone - as above, few inclusions of white, soft, fibrous gypsum. Drilled 31 mins./ft.
4750	4755	Limestone - as before, slight increase of grayish-white fragments, finely crystalline. Drilled 26 mins./ft.
4755	4760	Limestone - as before, common carbonaceous material occurring as fine coating, some iron-oxide staining, few fragments of white dolomite showing no porosity. Drilled 22 mins./ft.
4760	4765	Limestone - as before, generally brown, common iron-oxide staining, generally finely crystalline. Drilled 21 mins./ft.
4765	4770	Limestone - as before, few fragments of buff-brown, crystalline dolomite show fairly good vugular porosity, generally very crystalline, micaceous. Drilled 25 mins./ft.
4770	4775	Limestone - as before, very finely crystalline to micro-crystalline, some local iron-oxide staining, rare pyritization. Drilled 29 mins./ft.
4775	4780	Limestone - as before, dense to finely crystalline. Drilled 28 mins./ft.
4780	4785	Limestone - as before, common carbonaceous fragments and rare iron-oxide staining, cuttings are very fine. Drilled 23 mins./ft
4785	4790	Limestone - as before, generally gray-brown in color, very rare fine pyritization. Drilled 28 mins./ft.
4790	4795	Limestone - as before, very fine sandy cuttings, dolomitic, common subangular quartz grits, dense to crystalline, very hard, no carbonaceous fragments, generally light gray in color. Drilled 26 mins./ft.
4795	4800	Limestone - as last above. Drilled 34 mins./ft.
4800	4820	Limestone - as before, generally gray to gray-brown, dense to finely crystalline, sub-vitreous luster, rare chalky white fragments, finely micaceous, some carbonaceous coatings on limestone fragments. Drilled 32 mins./ft.

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4810	4815	Limestone - as above, generally brown, very fine-grained sandy texture, dolomitic. Drilled 21 mins./ft.
4815	4820	Limestone - as before, very fine cuttings, abundance of angular to sub-angular quartz grits, few free calcite crystals, rare iron-oxide staining. Drilled 16 mins./ft.
4820	4825	Limestone - as above, generally gray-white to brown in color, very fine cuttings. Drilled 18 mins./ft.
4825	4830	Limestone - as before, generally brown, dense to micro-crystalline, carbonaceous coatings and inclusions, rare iron-oxide staining. Drilled 15 mins./ft.
4830	4835	Limestone - as before, generally a mottled gray-white to brown, dolomitic, increase in iron-oxide staining. Drilled 16 mins./ft.
4835	4840	Limestone - as before, generally dense, rare fragments of white dense dolomite, rare pyritization. Drilled 22 mins./ft.
4840	4845	Limestone - as before, generally gray-brown in color with increase in white fragments and mottled white and brown, rare fragments of sugary textured dolomite, no porosity noted, very fine even cuttings giving sandy appearance to sample. Drilled 28 mins./ft.
4845	4850	Limestone - as before, mottled gray-white to brown-white, generally dense with fine-grained to silty, sandy coating, rare iron-oxide staining, rare free gypsum and carbonaceous fragments, some chalky white material. Drilled 28 mins./ft.
4850	4855	Limestone - as last above. Drilled 33 mins./ft.
4855	4860	Limestone - as before, generally brown-white to gray, rare green coloring, micro-crystalline to dense. Drilled 29 mins./ft.
4860	4865	Limestone - as before, generally gray-white with common white chalky, dolomitic material, generally dense. Drilled 29 mins./ft.
4865	4870	Limestone - as before, common chalky white, dolomitic material occurring as coatings and as free fragments, rare red and reddish-brown, very fine grained sandstone fragments. Drilled 24 mins./ft.
4870	4875	Limestone - as before, generally gray-white, few fragments of buff colored sandstone as above, rare fragments of deep green shale, rare fragments of carbonaceous material, common chalky white, soft, dolomite. Drilled 20 mins./ft.
4875	4880	Limestone - as before, slight increase in iron-oxide staining with small crystals of hornblende (?) or augite (?) associated with the stainings. Drilled 19 mins./ft.
4880	4885	Limestone - as above, commonly mottled brown-white, dense. Drilled 20 mins./ft.
4885	4890	Limestone - as before, some deep olive green-white coloring, some free calcite crystals. Drilled 25 mins./ft.
4890	4895	Limestone - as before, noted increase in green coloring, generally micro-crystalline with fine grained sandy texture associated with the green coloring, possibly a green sandy shale, dolomitic. Drilled 23 mins./ft.

#1 Teasdale Unit

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTION</u>
4895	4900	Limestone - as before, absence of green coloring noted, generally gray-white to gray-brown, dense to micro-crystalline with very fine grained, gray sandy coating. Drilled 25 mins./ft.
4900	4905	Limestone - as before, generally gray-white to brown, dense to finely crystalline, rare pyritization, rare greenish-gray coloring, some carbonaceous material. Drilled 28 mins./ft.
4905	4910	Limestone - as before, generally gray to brown with white mottled coloring, dense to finely crystalline, rare fragments of green, platy, very finely sandy shale, common light brown dolomitic limestone. Drilled 25 mins./ft.
4910	4915	Limestone - as before, possibly dolomitic, generally gray-white to brown-white, slight increase in green shale fragments, sample has powdery texture in general. Drilled 27 mins./ft.
4915	4920	Limestone - as before, dolomitic in part, probably 50% green shale as before. Drilled 26 mins./ft.
4920	4925	Limestone - as last above, dolomitic, rare black chert pebbles. Drilled 25 mins./ft.
4925	4928	Limestone - as last above. Drilled 27 mins./ft.

CORED

Recovered 2 feet.

4928 4930 Shale - very dark green, massive to finely sandy, brecciated appearance with large angular buff-brown limestone and white dolomitic fragments irregularly included in the shale matrix. Very badly fractured with all fractures running vertically and filled with secondary calcite. No evidence of slickensiding noted on fracture surfaces. 1 1/2 hours cutting time. No returns on circulation while cutting core.

Total Depth 4930

Well abandoned August 7, 1949

Samples examined by:

Mr. Scott  
*Mr. Scott*

Form 9-331a  
(March 1942)

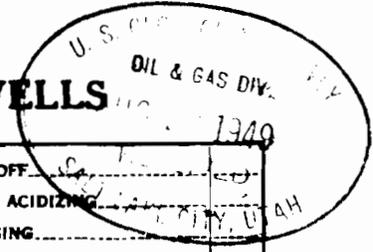
(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake  
Lease No. 68464  
Unit Keokuk  
Lease: Gray

AUG 12 1949

SUNDRY NOTICES AND REPORTS ON WELLS



NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

August 6, 1949

Well No. 1 is located 500 ft. from N line and 300 ft. from E line of sec. 17

NW NW NE Sec. 17  
(1/4 Sec. and Sec. No.)

24N  
(Twp.)

6E  
(Range)

Salt Lake  
(Meridian)

Keokuk Base  
(Field)

Wayne  
(County or Subdivision)

Utah  
(State or Territory)

The elevation of the derrick floor above sea level is 7000 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

This hole has been drilled to a total depth of 4930' without finding commercial oil or gas production in any of the formations encountered. Schlumberger log has been run. It is now proposed that this hole be plugged and abandoned.

It is proposed that cement plugs be placed as follows:

- 25 sacks 4930-4934
- 25 sacks 3700-3704
- 20 sacks 1900-1927
- 20 sacks 270-295
- 10 sacks 10-surface.

Marker to be erected and location cleaned up.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PACIFIC WYOMING OIL CORPORATION

Address 311 So. Center St., Casper, Wyo.

Approved AUG 12 1949  
C. A. Hauptman  
District Engineer

By [Signature]  
Title Division Superintendent

(SUBMIT IN TRIPLICATE)

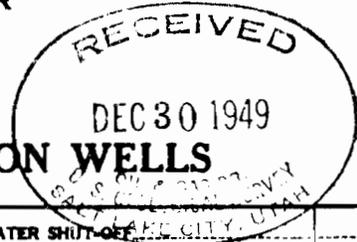
Land Office Salt Lake

Lease No. 00404

Unit Tandale

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

12-30-49



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 28, 1949

Well No. 1 is located 330 ft. from N line and 312 ft. from E line of sec. 17  
N 17 (4 Sec. and Sec. No.)      330 (Twp.)      6N (Range)      Salt Lake (Meridian)  
Tandale Dome (Field)      Wayne (County or Subdivision)      Utah (State or Territory)

The elevation of the derrick floor above sea level is 7811 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

On August 5, 1949, hole plugged as follows:

- 25 sacks cement      4500-4534
- 25 sacks cement      3000-3034
- 20 sacks cement      1900-1934
- 20 sacks cement      270-275 (Bottom of surface string.)
- 10 sacks cement      10-Surface

Regulation marker has been erected and location cleaned up.

Inspected by District Engineer on November 29, 1949, and found to be satisfactory.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PACIFIC WESTERN OIL CORPORATION

Address 311 So. Center St., Casper, Wyo.

Approved DEC 30 1949

Castro  
District Engineer

Original Signed  
By J. A. DEFFEYER

J. A. Deffeyer  
Title Station Superintendent